Faculty of
Computing, Engineering and Technology

STAFFORDSHIRE UNIVERSITY

GradEX2012

CREATE THE **DIFFERENCE**

Dear Visitor,

We are once again delighted to welcome visitors, old and new, to our annual exhibition of work undertaken by students in the Faculty of Computing, Engineering and Technology at Staffordshire University. GradEX has been running for many years and is a well established diary fixture showcasing work undertaken by final year students as part of their project. The purpose of the exhibition is to enable students to show their work to their colleagues, to staff, to prospective employers and to members of the public.

The opportunity to explain their work to others plays an important part in the formation of our graduates. Also it is an opportunity for employers to speak to graduates on a more personal basis, and frequently leads to offers of jobs being made to our students.

As previously, GradEX 2012 is sponsored by a range of employers and professional organisations. We are very grateful for the support that we receive and for the added esteem that this brings to the exhibition. The sponsorship also serves as a mark of the recognition that employers have for the work of our students.

We are very proud of our students and GradeEX enables us to celebrate the achievements of our students and of our researchers and we hope that you will enjoy the day with us and share in that celebration.

Best Wishes
Professor Michael Goodwin
Dean of Faculty of Computing, Engineering and Technology

Main Event Sponsors

ALSTOM

bcs The Chartered Institute for IT North Staffordshire Branch

IMIS

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SYNECTIC SOLUTIONS

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Main Event Sponsors

Alstom is a global leader in the world of power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom builds the fastest train and the highest capacity automated metro in the world, provides turnkey integrated power plant solutions and associated services for a wide variety of energy sources, including hydro, nuclear, gas, coal and wind, and it offers a wide range of solutions for power transmission, with a focus on smart grids. The Group employs 96,500 people in more than 70 countries, and had sales of over €23 billion * in 2009/10.
*Proforma figures

Alstom Grid, the newest sector of Alstom, has over 100 years of expertise in electrical grids. Whether for utilities or electro-intensive industries or the trading of energy, Alstom Grid brings power to customers' projects and ranks among the top 3 in the electrical transmission sector with a sales turnover of approximately €3.5 billion in 2009. It has 20,000 employees and over 90 manufacturing and engineering sites worldwide. Its four main business areas are Products, Systems, Automation and Service. At the heart of the development of Smart Grid, Alstom Grid offers products, services and integrated energy management solutions across the full energy value chain - from power generation, through transmission and distribution grids and to the large end user. Alstom Grid employs over 1400 people in Stafford and is part of Alstom UK employing over 6,500 people across 30 locations in its three business sectors of Grid, Power and Transport. It's all about people. If you are looking to contribute to global, social and environmental change then consider a career with us. Visit Alstom Careers to learn of the diversity of challenging opportunities in our company. www.alstom.com/careers

For more information on Alstom, see www.alstom.com

North Staffordshire Branch

Our mission as BCS, The Chartered Institute for IT, is to enable the information society. We promote wider social and economic progress through the advancement of information technology science and practice. We bring together industry, academics, practitioners and government to share knowledge, promote new thinking, inform the design of new curricula, shape public policy and inform the public.

Our vision is to be a world-class organisation for IT. Our 70,000 strong membership includes practitioners, businesses, academics and students in the UK and internationally. Joining BCS is a great idea…

As a member of BCS, The Chartered Institute for IT, you'll enjoy a huge range of benefits to aid your studies including:

- Networking opportunities
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- Dedicated Young Professionals Group (YPG)
- Online Member network
- 40 UK branches and 15 international sections
- 50 specialist groups

Free online library

- Books 24/7 – 250 IT and business related e-books
- Up to 3 Forrester Research reports a month available to download
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Online services

- Weekly and monthly e-newsletters
- Latest IT industry news
- Upcoming events, seminars and job opportunities

Professional development

- First step towards Professional membership (MBCS)
- Recognition from leading IT organisations
- Defined route to Chartered IT Professional (CITP) status

Career development tools

- Map out your career path and discover the skills you need
- Plan the training and development you'll need to get there
- Get advice on writing CVs and letters and interview techniques
- Access the latest jobs via www.bcsrecruit.com

For more information, visit www.bcs.org

IMIS

IMIS is the leading professional association in the Information Systems management sector. A registered charity, it has consistently played a prominent role in fostering greater understanding of the importance of IS management, working to enhance the status of those engaged in the profession, and promoting higher standards through better education and training both in the UK and overseas.

While there are several professional associations concentrating primarily on the technical side of the IS equation, IMIS is the only one which focuses specifically on the practical application and management of information systems within our society. It is our vision to see Information Systems Management recognised as one of the key professions influencing the future of our world. IMIS is a professional institute and a registered Charity, governed by a Council of duly elected members. The day-to-day affairs of the Institute are administered by a full-time staff, headed by a Chief Executive who is answerable to the governing Council. In addition to Council, a number of Committees, comprising members and staff representatives, deal with specific issues and areas of Institute policy.

Membership Profile
Membership in IMIS exceeds 6,000 people in over 50 countries around the world. They are drawn from a wide range of industry sectors and IS related functions. Members come from both public and private sectors, and control millions of pounds of annual information technology investment. Approximately 40% of our professional members originated in non-technical disciplines; giving IMIS a unique position as the forum for dialogue among all users and managers of information systems. Our student members are working their way through the IMIS syllabus of examinations. Coming from diverse countries and cultures around the world, they value the unified standard of IT knowledge and excellence inherent in the IMIS qualifications. To find out more please visit **www.imis.org.uk.**

matchtech

Matchtech is one of the UK's largest specialist recruitment agencies. We offer graduate opportunities for both contract and permanent employment across a variety of sectors. Our specialist areas include:

Electronics and Software Systems, Software Development, Networking and Support, Cyber Security, Digital Media and Project Management and Controls and Automation.

Our experienced teams of consultants are well placed to advise on employment prospects, matching your experience and aspirations with the needs of key clients. We have opportunities across the UK and work for large and small companies alike.

In the last year we have placed just under 400 recent graduates into various roles across the UK.

Matchtech is dedicated to quality and professionalism and we are members of both the Recruitment and Employment Confederation (REC) and the Association of Graduate Recruiters (AGR).

To register and for more details about Matchtech and our vacancies please visit us at www.matchtech.com/graduates or contact our graduate team on:
t: 01489 884382
e: graduatejobs@matchtech.com

SYNECTICS SOLUTIONS

Established in 1992 Synectics Solutions is an independently owned data management company, employing over 200 staff over three secure sites. We run managed database services for many blue chip clients, handling billions of rows of data worldwide.

Our expertise in areas such as fraud is well recognised in both the public and private sectors, priding ourselves in the diversity of our workforce, which enables us to produce a unique skill set, well matched to the projects that we undertake. With a company culture that we are very proud of stems from the way we encourage our employees to participate in the development of their own environment. We have many examples of current employees that came to us for their placement year and have since returned upon graduating, several of these are now successful managers!

This is just a flavour of Synectics, our mission statement that we put together as a company, really says it all:

"Synectics Solutions is a company whose name means 'problem solving by creative and lateral thinking among a diverse group.' We aspire to be the independent world leader in the provision of innovative data driven business solutions for our clients.

By providing a warm, friendly, caring and supportive environment we aim to harness and nurture the full potential of our employees through empowerment to achieve excellence in all our business operations.

We strive to build and develop long term relationships with customers and suppliers based on integrity and creativity. We are proud of our company culture which is professional, ethical and always fun loving."

For more information on our excellent graduate schemes and career opportunities please visit our website at www.synectics-solutions.com, email us at recruitment@synectics-solutions.com or come along and meet the recruitment team at GradEx 2012

Todd Anderson

BSc(Hons) Motorsport Technology

e: todd_21@hotmail.co.uk

An Investigation into Using Electric Bikes for Racing

This project is a kit designed to replace the petrol engine in a motorbike. The kit will be a direct swap with modifications to the frame not necessary. For use on the track and possibly within a race series.

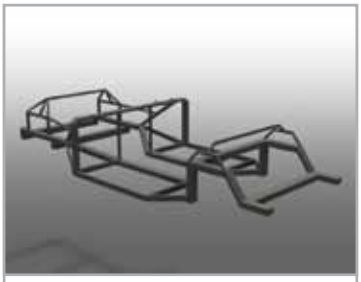
Harry Bailey

BSc(Hons) Automotive Technology

e: hjb1991@hotmail.co.uk

Engine Induction System Development and Analysis

The project investigated parameters involved in the design of successful induction manifolds. From a base of theoretical improvements to a case study Zetec 1600cc Ford manifold; Computational Fluid Dynamics, Ricardo Wave simulations and solid modelling in Creo were used to create a better performing manifold.



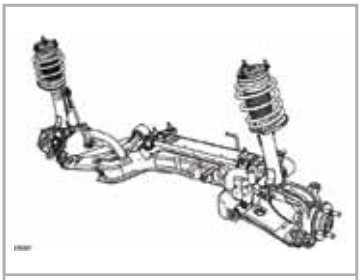
Robert Bennett

BSc(Hons) Automotive Technology

e: robben123@hotmail.co.uk

Design and Analysis of an Automotive Chassis

The project being put forward to be shown at GradEX 2012 is the design and analysis of an automotive chassis to accommodate the full powertrain from a Jaguar S type, this chassis will appeal to the kit car building market as well as the motorsport industry.



Robert Cartwright

BSc(Hons) Automotive Technology

Vehicle Dynamics, Suspension Modelling and Characterisation

Vehicle dynamics, suspension modelling, characterisation and development for the Fiesta St; looking at improving vibration and harshness as well as better handling characteristics of the vehicle. Using MSC Adams software to build, simulate various scenarios and analysis of results.

Matthew Clarke

BSc(Hons) Motorsport Technology

e: mclarke06@hotmail.co.uk

Data Logging in Karting

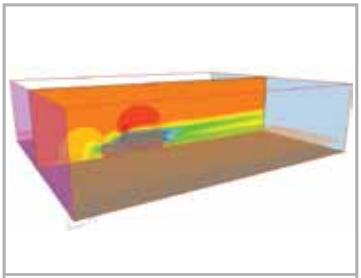
This project is an investigation into data logging systems utilised in the karting environment.

Sukhdeep Dhillon

BSc(Hons) Automotive Technology

Analysing Suspension Setups of a Car at Two Ride Heights

The project will be based on the suspension components and type of suspension, which in this case is a coilover system that is currently on my automobile, and to then analyse the suspension components along with the car ride height at two different levels. The car and suspension setup will both be of my own vehicle.



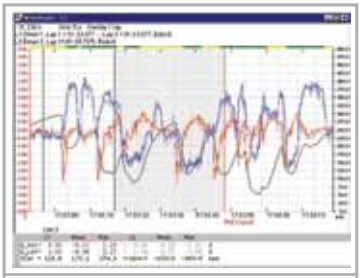
Christopher Gillon

BSc(Hons) Automotive Technology

e: chrisssyg@gmail.com

Redesign of the Land Rover Defender, Focus on Drag Reduction

This project looks at designing a new Land Rover Defender as the current model is out of date and due a replacement. The new model will be based upon the original design principles of the Defender, featuring a more aerodynamically efficient outer body. The aim of this is to reduce the aerodynamic drag of the vehicle.



Matthew Gray

BSc(Hons) Motorsport Technology

e: MattCGray90@gmail.com

Investigation into Data Analysis and Acquisition in Motorsport

The project looks at the varying needs of analysis and acquisition at different levels and in different disciplines of Motorsport, from research carried out into software and equipment, suggested specifications will be created for a range of disciplines.

Christopher Harvey

BSc(Hons) Automotive Technology

e: chrisjharvey120190@hotmail.co.uk

Improving the Aerodynamic Efficiency of a Mark 3 Ford Capri

Redesigning the legendary Mark 3 Ford Capri to be more aerodynamically efficient. This will be completed through thorough research into various aerodynamic principles and extensive CAD modelling within Autodesk Alias Automotive which will be tested thoroughly by CFD analysis within Cham Phoenics.

Ryan Hextall

BSc(Hons) Motorsport Technology

e: ryanhextall1@hotmail.com

Motorsport Wheel Retention Device

This project focuses around fast pit-stops being the key to success in Motorsport events. This is the area where races can be won and lost. The design of a new wheel retention device could make or break a team's race season. The project will cover design, safety and performance.

Precious-Kish Inyang

BEng(Hons) Electrical Engineering

e: precious_kish@yahoo.com

Electric Vehicle Design and Energy Recovery and Storage Systems

The aim of this project is to build a battery driven car that works, design an efficient energy recovery system, tapping from the 'normally' waste energy and also provide a suitable storage of the energy for future use by the vehicle.

Karim Kargbo

BEng(Hons) Automotive Electronics

e: kargbo870@hotmail.com

Tyre Tread Depth Monitoring System

With the rapid increase of electronics systems in automotive technologies, an investigation is being carried out in order to derive a solution to be used in the incorporation of a tread depth monitoring system.

Timothy Leather

BSc(Hons) Automotive Technology

e: timothy2889@aol.com

Scale Vehicle Platform

This project is designed to fulfil the requirements of testing and demonstrating vehicle dynamics accurately at Staffordshire University. On an existing scale vehicle the dynamics are analysed and redesigned using full size vehicle dynamics principles and theories to produce a dynamically accurate vehicle.

Mark Lloyd

BEng(Hons) Automotive Engineering

e: marlloyd@gmail.com

Two Wheel Drive Electric Motorcycle Concept

The concept will explore the possibility of a two wheel drive electric motorcycle aimed at the mid-sized sport motorcycle market.

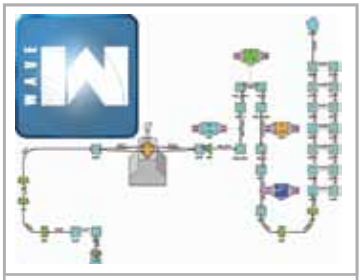
Miguel Angel Martinez Galindo

BEng(Hons) Mechatronics

e: miguel.angel.martinez.galindo@gmail.com

Investigation Into Effects Of Downsizing

Downsizing works with IC engines and is the combination of a small displacement engine with a new generation of turbochargers, in order to obtain benefits comparable or even superior to higher displacement engines. The question is are these kinds of engines are really as powerful and reliable as companies say they are?



Aaron Mifflin

BEng(Hons) Automotive Engineering

e: aaron_mifflin@hotmail.com.au

Design Considerations for Compact Automotive CI Engines

The use of compact, turbocharged diesel engines in order to meet stringent emissions standards and drive down costs is becoming much more prevalent in the automotive field. This project documents the development of a single-cylinder prototype engine and comments on the impact of biofuel blends on overall performance.

Kingsley Otoo

BEng(Hons) Automotive Electronics

e: kingsley_05@hotmail.com

Motorsports Telemetry and Data Acquisition Systems

Data acquisition and telemetry systems are used in race cars to monitor the car's behaviour. The project will develop a Labview based data acquisition system to monitor the vehicle and driver performance. Sensors will measure the performance of a race electric car and Labview will be utilised to control the system.

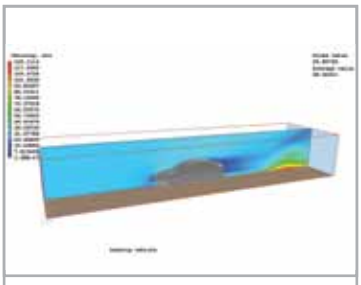
Andrew Parr

BEng(Hons) Automotive Engineering

e: andy.parr19@gmail.com

Underbody Aerodynamic Behaviour of a Modern Road Vehicle

Aerodynamics plays a key role in the development of vehicles in the automotive industry. This project focuses on the underbody of a road vehicle and investigates aerodynamic behaviour of the factory design. Improvements will be trialled using CFD analysis with conclusions drawn related to efficiency and cost saving.



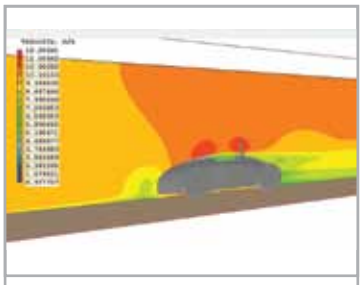
Christopher Phillips

BEng(Hons) Automotive Engineering

e: chris_phillips22@msn.com

Improving the Aerodynamic Efficiency of a Standard Road Car

The aim of my project is to create a model car that has a successfully reduced drag coefficient using initial research in aerodynamics and experimenting using a software called Phoenics. The final model will be compared to the original model to show what improvements have been made.



Matthew Renney

BSc(Hons) Motorsport Technology

e: mattrenney@hotmail.co.uk

The Aerodynamic Design for a Greenpower F24+ Body Shell

This project is to create an aerodynamic design for an F24+ race car body shell. This will involve research into existing body designs and aerodynamic aids in motorsport. Designs can then be produced following the regulations of the series. CFD software will be used to analyse them before a final design is chosen.

Andy Schmid

BSc(Hons) Motorsport Technology

e: schmidandy@live.com

Investigation into Articulated Drive System for Snow Bike

Driving on snow has always been difficult, take away two tyres and you have almost no chance. The project aims to investigate and design an articulated snow track system for a motorcycle, investigating bike handling dynamics and complex mechanisms. The system will be designed in Creo, tested and simulated in MD Adams.

Jonathan Scoltock

BEng(Hons) Automotive Engineering

e: jon_scoltock@hotmail.com

Front Wheel Drive Rally Car Rear Suspension Development

Front wheel drive is often seen as an extreme limitation in a competition environment. This study has focused on development of a rear suspension system for a front wheel drive rally car, utilising CAD and simulation software to maximise vehicle performance, whilst maintaining sufficient durability.

Mitchell Smith

BSc(Hons) Automotive Technology

e: msmit988@hotmail.co.uk

Investigation into Maximising Suspension Articulation

Investigation into maximising the suspension articulation of a 4x4 competition vehicle using computer simulation software, MD Adams.

Jack Tait

BEng(Hons) Automotive Engineering

e: jack_tait@hotmail.com

Automotive Chassis Design - Ev Trike

Design and analysis of the electric front wheel driven JTR Trike, initially designed to be a single seater sports vehicle, with the addition of extra seating modules it can be converted into a 3 seater commuter vehicle. CAD Designed and Stress tested the chassis is engineered to handle the specified demands of the road.

Mark Tunnicliffe

BEng(Hons) Automotive Engineering

e: mark_tunnicliffe@hotmail.co.uk

Design and Analysis of Lightweight Race Car Rear Suspension

The acceleration of a vehicle is limited by its mass and the force generated by its tyre contact patches. Reducing and increasing these quantities respectively is critical to optimise performance. This study documents the design and analysis of the rear suspension system of a lightweight single seat racing car.

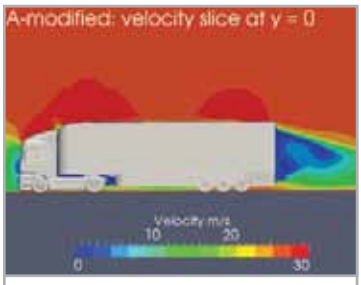
Matthew Westerman

BSc(Hons) Motorsport Technology

e: mattwesterman87@googlemail.com

Design of a Hub Mounted Electric Drive Motor for Motorsport

The aim of this project is to design a hub mounted electric drive motor for a race car application. The project is intended to address some of the problems associated with hub mounted electric motors in order to achieve the most successful design for an electric race series.



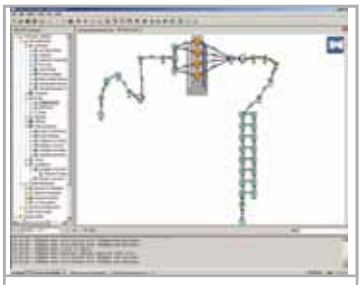
Adam Willett

BSc(Hons) Automotive Technology

e: adamgwillett@gmail.com

An Investigation into Improving HGV Aerodynamics

An investigation into improving the aerodynamic properties of HGVs pre and post production. The project has resulted in individual drag reducing products as well as a complete re design of the truck / trailer, for potential future super low drag truck design.



Lee Williams

BEng(Hons) Automotive Engineering

e: Lee.d.williams@hotmail.co.uk

Investigating Spool Speed on Turbo Diesel Engines

Looking into the factors that cause and affect turbo-lag on turbocharged diesel car engines and how they can be reduced or eliminated.

Adam Wilson

BEng(Hons) Automotive Engineering

e: chilln47@hotmail.com
w: www.facebook.com/amwilson27

Improving the Aerodynamics of a 1/4 Scale RC Car

This project takes a look at the aerodynamics of a typical 1/4 scale RC car and investigates ways in which they can be improved upon, whilst retaining the overall design of the BMW 3 series, on which the project is based.

Microsoft DreamSpark
Dream Today. Create Tomorrow

Michael Abayomi

BSc(Hons) Computing Science

Virtual Personal Trainer

The project's goal is to create a platform where users will be able to receive exercise plans automatically according to inputted information such as height, age and fitness goals. Such platform will be created as a Web Application allowing such program to be scalable for mobile devices such as Tablets and Smartphones.

Syed Akber Ali

BSc(Hons) Computer Science

e: akber567@hotmail.com
w: www.inichesolutions.com

Real-Time Plus Helicopter

This project is to program an Autonomous Helicopter. The helicopter has an ultrasonic sensor. Aim of this project is to research and develop a real-time system which will help the helicopter in flying and maintaining its height over a path. Moreover the helicopter will also analyze and performs some autonomous movements.

Kris Allsopp

BSc(Hons) Computing Science

Simulating Footfall within a Shopping Centre

Software which aims to simulate pedestrian flow within a shopping centre.

Richard Bayes

BEng(Hons) Computer Networks and Security

e: ozzybayes@gmail.com

Hacking Techniques within a Networked Enviroment

A look into hacking techniques used, along with way(s) to mitigate these attacks within a corporate environment. Techniques from DDOS, WEP/WPA, Session HiJacking to Physical Security will be analyses and tested.

Lewis Beavon

BEng(Hons) Software Engineering

e: beavon.lewis@gmail.com
w: http://uk.linkedin.com/in/lewisbeavon

A Cloud Based Streaming Media Player for Android Devices

The project investigates the different types of cloud services available and the use of these for streaming and management of music, video and photos to an android device over Wi-Fi and mobile networks.

David Samuel Bell

BSc(Hons) Software Engineering

e: d.s.bell@hotmail.co.uk
w: www.linkedin.com/pub/david-bell/43/94b/66

Gesture Based Enabling of the Desktop Operating System

Imagine you are physically disabled, or a child attending a special needs school, and are unable to use a computer mouse or keyboard. Is it physically possible or practical to be using a standard desktop computer? This project aims to provide a mechanism which enables these users to control a computer through gestures.

Matthew Blackford

BSc(Hons) Software Engineering

e: mblackford@live.co.uk

An Efficient Android to Generic Database Connecting System.

This system enables any mobile device based on the Android mobile operating system to connect to a generic remote database or web server then send and receive data from the said server in an efficient, reliable and secure manner.

Matthew Brown

BSc(Hons) Computing Science

e: mattab89@live.co.uk

Generic Analytical Scheduling Management System

The project has been developed to enable staff working within the education profession to generate reports more effectively and easily than the previous system in place along with the added benefits of scheduling and emailing specific generated reports to parents/guardians along with tiered user interaction.

Microsoft DreamSpark
Dream Today. Create Tomorrow

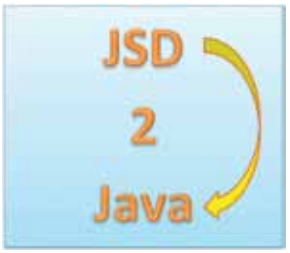
Nick Fisher

BSc(Hons) Computing Science

e: captainnick13@googlemail.com

Exploring the Benefits of Cloud Based IT Systems

Evaluating the pros and cons of developing a CRM system using the Force.com cloud based platform and the Java EE traditional application server platform.



Adam Gerry

BSc(Hons) Computer Science

e: adam@stardock.org.uk

A System to Generate Code Version of a JSD Specification

Jackson System Development (JSD) is a computationally complete system modelling methodology. This project will convert a set of JSD diagrams into a working system.

Peter Richard Goudman

BSc(Hons) Computer Science

e: prgoudman@yahoo.co.uk

Computer Controlled Unmanned Aerial Vehicle (UAV)

A project that documents the research, design and implementation of a computer controlled unmanned aerial vehicle (UAV). The project undertakes the development of a helicopter airframe utilising an embedded micro-controller and sensors to manage the flight of the airframe.

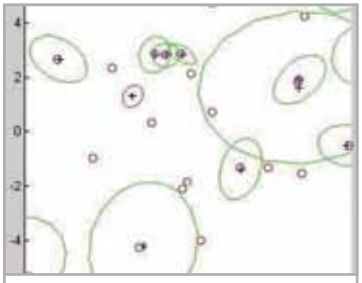
Richard Handy

BSc(Hons) Software Engineering

e: richard.handy@btinternet.com

Using Software Engineering to Create a 2D Computer Game

Ponies, software engineering and games. This project combines them all in ways not seen before to display good use of software engineering to create a quality computer game based on ponies!

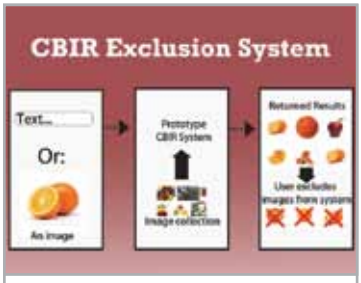


Daniel Hart

BSc(Hons) Mathematics and Robotics Technology

An Investigation into SLAM Algorithms in 2D Space

The main aim will be to implement a SLAM algorithm on a mobile robot using a laser range finder and encoders as sensory information. The robot should be able to move through the environment while mapping it and locating itself within the map.



Thomas Hart

BSc(Hons) Computing Science

e: tomhart2006@gmail.com

Content-based Image Retrieval (CBIR) Exclusion Prototype

Images are treated in a similar way to text when it comes to searching through a collection with each image involving text based retrieval and tagging. The idea for this prototype is to create a means of ordering images by visual features and then to allow the user to exclude them from a catalogue of images.

Dale Johnson

BSc(Hons) Computing Science

e: dale7920@gmail.com

A Survey and Visualisation Application for HPC Requirements

The product created during this project will be used to gather, manipulate and visualise results for a High Performance Computing survey. The survey results will be manipulated to generate charts for use when requesting CPU hours on the High Performance Computing equipment at Rolls-Royce plc.

Jemma Kemp

BSc(Hons) Computing Science

e: jemmakemp@gmail.com

Interactive Language Learning Platform for Key Stage 2

An online system designed to help Key Stage 2 pupils learn the basics of a modern foreign language. This project focuses on creating an exciting learning resource for both pupils and their teachers which includes giving them real-life scenarios to interact with and evaluates their progress.

Microsoft DreamSpark
Dream Today. Create Tomorrow

Daniel King

BSc(Hons) Forensic Computing

e: dan.king333@gmail.com

An investigation into Data Recovery on Android Base devices

To investigate methods to bypass the lock screen, not dependant on the chosen security method to lock the device (pattern, pin, passphrase) by the user. These methods will be focused on firmware alterations to the device, looking to remove the user implemented security measure and access the user data.

Clemens Manert

BSc(Hons) Computing Science

e: Clemens@Manert.de

Vertumnus - a backup system

The project is about a backup system which can be used over command line or Gui and a rule system where the user can define rules.

Bradley Mansell

BSc(Hons) Software Engineering

e: bmansell@hotmail.co.uk

A Prototype Collaborative Project Management Tool

A Prototype Collaborative Project Management Tool to help Software Businesses improve upon the quality of Software they currently produce.

Lee Mason

BSc(Hons) Computer Science

e: leemason7@googlemail.com

Generic Timetable Optimisation using Efficient Algorithms

Timetable optimisation is amongst the NP-Complete problems of algorithms, meaning that an efficient algorithm which produces an optimal timetable is not yet in existence. Therefore algorithms have been researched which produce a good enough timetable efficiently, and then implemented to aid scheduling.

Kudakwashe Nyadzo

BEng(Hons) Software Engineering

e: knyadzo@hotmail.com

University Information Access Application

An Android mobile application which allows users to access university information and links to news, social and other university organisations such as the Student Union website. It includes a map application which shows the user via Google Maps their location on campus, and how to navigate around the campus.

Luke Perry

BSc(Hons) Computing Science

e: Luke.r.perry@hotmail.co.uk

An Investigation in Web Design and Security.

I am investigating the steps needed to create an effective and secure website that is also viewable on mobile devices. This will then be used to create a website for the Stafford Sub-Aqua club.

Randika Ratnayake

BSc(Hons) Software Engineering

e: randikaratnayake@hotmail.com

Money Management Software using OFX Platform

A Web based money management application that enables users to manage, forecast and review financial records to help make better financial decisions. The application also demonstrates how the Open Finance Exchange (OFX) platform could be used to aggregate financial data from various sources across the internet.

Ravideep Rattan

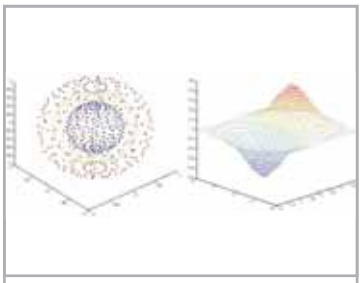
BSc(Hons) Forensic Computing

e: ravrattan7@gmail.com

A Mobile Application for Data Gathering on Android Devices

A 3rd party data gathering application for the Android mobile operating system which will execute a search by a keyword. This application will involve extracting data comprising of text messages, call logs and media files based around the specific keyword.

Microsoft DreamSpark
Dream Today. Create Tomorrow



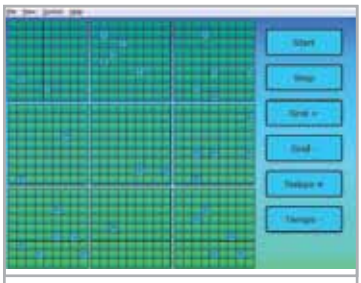
Josh Sinfield

BSc(Hons) Computer Games Programming with Software Engineering

e: joshuasinfield@googlemail.com

Viewing Oceanographic Data in Three Dimensions

A solution for producing three-dimensional views of near-real time data after they are collected from oceanographic samples, allowing interaction, presentation and screening of the data. The software artefact provides a concise all-in-one facility to represent data in a three-dimensional environment.



Adilee Slaney

BSc(Hons) Computing Science

e: lee.sell@live.co.uk

Context Aware, Real-time Ambient Audio Generator.

The system will take user input (such as mouse and keyboard) and synthesize unique real time ambient audio. The aim being to increase immersion within the subjects' work and possibly increase attention span and users' mood towards the actions/work they are performing.

Chontell Smith

BSc(Hons) Web Design

e: chontellsmith@hotmail.co.uk

Online Interactive Family Diary

To create an online interactive family diary that can be accessed on mobile and internet devices.

Lee Walters

BSc(Hons) Software Engineering

e: lee.stuart.walters@gmail.com

Context-Aware Mobile Linguistic Support

A prototype application aimed towards the Android platform. The purpose/function of the application is to provide the intended user with support to develop their linguistic skills, different elements of media are to be used to help achieve this. Context-awareness will also be adopted to improve user experience.

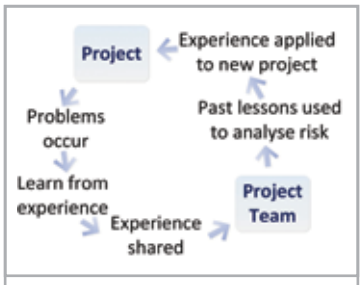
Pierre-Alain Bedu

BSc(Hons) Computing Science

e: pierrealain.bedu@gmail.com
w: facebook.com/pabedu

A Restaurant Order Management System using Mobile Devices

Creating an internal website and a Web based application for restaurant owners. The focus is to enable food orders to be taken with an application while seated in a restaurant or at home. Staff would be able to manage restaurant information and orders made with mobile devices via the internal website.



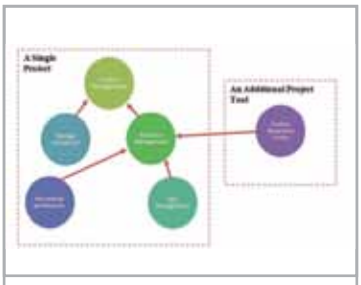
Rebecca Cook

BSc(Hons) Information Systems

e: rcook@lavabit.com

A System to Support Documentation of Project Experience

This system is designed to encourage the documentation of knowledge gained from experience. These are in the form of lessons, which are successes or failures that arise during projects. The benefit of this is to provide advice to those working on similar projects in separate locations or for future reference.



Michael Dukes

BSc(Hons) Computing Science

e:michaeldukes@me.com

Programme Information Management System

It is proposed to develop a Programme Information and Management System which will create and manage programmes and projects. A high level system should include aspects of business tracking tools and software and introduce a new element, which will be the integration of these functions into the whole system.

Adam Egan

BSc(Hons) Computing Science

e: adam.egan@bytestream.co.uk
w: www.bytestream.co.uk

Bespoke CRM System

A bespoke CRM system incorporating the automation and management of many organisation-specific functions, with focus on the centralisation of data and improvement in its integrity.

Laura Fraser

BSc(Hons) Mathematics with Applied Statistics

e: laurafraser22@btinternet.com

An Investigation into the Effects of Tuition Fee Rises

This study was designed to find out whether the recent increase of tuition fees have affected local sixth formers' and college students' decisions on higher education. Survey data was analysed using various statistical methods in order to see if the rise has discouraged pupils from studying at university.

Geoffrey Kang'ombe

BSc(Hons) Computing Science

e: geoffrey.kangombe@gmail.com

Purchasing Requisition with Integrated Stock Management

Also known as PPR-SM this is a system which will allow the organisation to place orders, monitor all orders, manage stock levels, issue stock to different departments, invoice matching, track issued stock, track faulty stock back to supplier and produce reports.

Sean Lambe

BSc(Hons) Mathematics with Applied Statistics

e: cristiano_lambe@hotmail.co.uk

Smoking Patterns of Staffordshire University Students

An investigation into the effects of, attitude towards, and awareness of smoking of Staffordshire University students.

Mathieu Levillain

BSc(Hons) Computing Science

e: math-tie@hotmail.fr
w: www.facebook.com/mathieu.levillain

A Prototype Dashboard Web Site Gathering Your Social Network

The project is a website that will get information from Facebook, Twitter, and BBC News, using API and RSS Feed. It also provides a possibility to drag and drop blocks into the page to configure as one pleases.

Daniel Manning

BSc(Hons) Applied Computing

e: dan.manning@live.co.uk

Mobile Solution for Choice Based Letting Scheme

Would a mobile solution increase the availability and usability of the choice based lettings scheme Choose Your Home (CYH) provided by The Wrekin Housing Trust?

Mbongeni Maphosa

BSc(Hons) Computing Science

e: mbongeni.maphosa@sky.com

Care Management System

This management system will improve the efficiency and effectiveness of the nursing home. It will have features such as appointment reminders to ensure that patients will no longer miss their appointments as well as automatic invoicing to reduce errors encountered previously.

Charlene Pottinger

BSc(Hons) Computing Science

e: charlene_pottinger@hotmail.com

Centralised Knowledge Base Information System

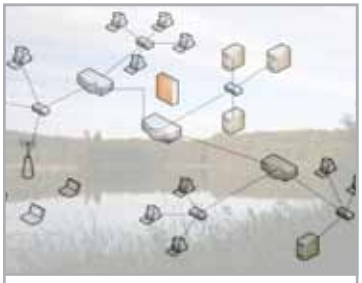
ACS ITO UK requires staff to follow heterogeneous service delivery processes for all customers and systems, regardless of the legacy systems in use. To achieve this they require a central reference point that will identify specific key information for every Customer and System under contract.

Mustafa Sharddar

BSc(Hons) Mathematics with Applied Statistics

Regression Models for the Epidemiology of Diabetes

This project looks at developing regression models from data collected by Health Survey for England 2009 with the aid of statistical software SPSS, to identify the risk factors associated with diabetes and predict the prevalence.



Sebastian Sperber

BSc(Hons) Computing Science

e: basti.sperber@googlemail.com

Network Management Tool with Green Networking Support

A Java based network management tool which allows users to track and monitor their network components. The software will include functions that should help to achieve Green Networking goals, which means to reduce the energy consumption of computer networks.

Kusum Thapa

BSc(Hons) Computing Science

e: kusumthapamagar@gmail.com

A Prototype Enterprise Student Timetabling System

A prototype web based application with Java EE, developed for students, enabling them to visualise and integrate their selected modules' timetable into a clash-free master timetable. The application data synchronises with the live university timetable information system and notifies student of changes.

James Weston

BSc(Hons) Computing Science

e: weston@meamod.com
w: fleetgt.com

FleetGT Asset Management

FleetGT is a global fleet management and tracking system to allow for easy managing of small to large vehicle fleets. Using a more streamlined interface than other systems, it focuses on ease of use whilst providing a low cost alternative.

Daniel Askey

BSc(Hons) Product Design with Management

e: askey91@hotmail.co.uk

Golf Trolley with Integrated Technology

This golf trolley aims to improve the user's golfing ability through technology that is integrated into it. The trolley incorporates GPS technology to measure distances on the course and improves the user's shot selection. Integration of this technology is through the iPhone connection on the trolley and its own App.

Amrita Baryana

BSc(Hons) Mathematics with Applied Statistics

Measuring Attitudes towards Single Sex Schools

As part of my research project, I asked people about their opinions towards single sex schooling. I also looked into what factors affect students' exam results and whether students who attend single sex schools do better than those who go to mixed sex schools.

William Boaz

BEng(Hons) Mechanical Engineering

e: willboaz123@hotmail.com

A Comparison of Mountain Bike Rear Suspension Design

This project looks into modelling different mountain bike suspensions and setups, which will then allow them to be compared by running simulations to see how they react and if the different designs act in similar ways or whether they are very different from each other.

Jonathan Brenno

BSc(Hons) Mathematics with Applied Statistics

e: j.brenno@sky.com

A Modelling of the Test Performance of Rubber Samples

Rubber samples are passing the hardness test then failing the stiffness tests. The task is to attempt to identify if any of the measured variables, within a sample number, can be used to accurately identify samples that will pass both hardness and stiffness tests, and thus identify failing samples.

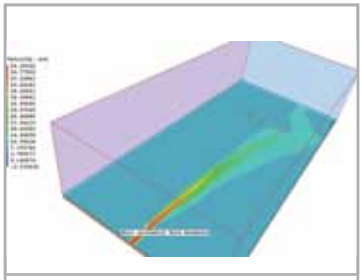
Tan Sen Cheah

BEng(Hons) Mechatronics

e: sam901221@gmail.com

Multi Competitor Timing System

This project is to design and test a remote time keeping system. This timing system allow up to six competitors to be timed at once and finish in any order. The system can calculate the total time of the penalties and the time competitors take to complete the race.



Stephen Collins

BSc(Hons) Aeronautical Technology

e: steve@uicts.co.uk

Investigation of the effects of Prop. Wash on Glider Wing

The purpose of the research is to better understand the dynamics of the effects of cross wind propeller wash on glider wings during the ground run of an aero-tow. This research is for the British Gliding Association to further understand the causes of a glider wind drop, to reduce accident rates in this area.

Robert Cornford

BSc(Hons) Aeronautical Technology

e: cornford4@googlemail.com
w: www.linkedin.com/pub/robert-cornford/48/38/100

Retrofit of Ejection Seats into the Grob 115

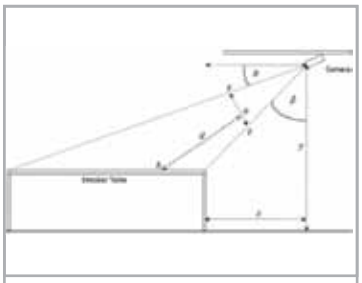
This project looks at the viability and design methods of retrofitting ejection seats into the Grob 115 to increase the scope for advanced training using the aircraft.

Tim Cox

BEng(Hons) Product Design Engineering

Stand Alone Filling Station with Integrated Technology

This is a concept design for a stand-alone small scale version of a typical filling station. Users will have a refuelling experience which incorporates a variety of fuels and payment methods. Is a flexible concept for different fuel options to best serve the user. It will include technology to reduce misfuelling.



Aaron Davies

BSc(Hons) Mathematics with Applied Statistics

e: itearmyheartopen@hotmail.co.uk

Investigating the Factors Which Affect Success in Snooker.

In the game of snooker, many mathematical variables that can affect a player's success are often overlooked. This investigation aims to collect and analyse data relating to a selection of shots in order to identify which areas of a player's game should be improved upon in order to increase their success rate.

Aaron Davies

BEng(Hons) Mechanical Engineering

e: aarondavies6@gmail.com

Using Finite Element Analysis to Test a Motorcycle Frame

By using computer packages it is possible to design and then test a design, to determine the performance of a motorbike frame by optimising the strength and minimising the mass, to improve the stiffness resulting in better handling characteristics of the bike and aiding in the reduction of acceleration times.

William Day

BSc(Hons) Product Design Technology

e: willday91@hotmail.co.uk

Trolley with Integrated Technology for Retail Employee Use

This innovative stock-control trolley design incorporates integrated technology that is designed for use by employees within the supermarket environment. It is capable of encouraging good organisation, efficiency and communication for the employees, enabling them to effectively carry out a variety of retail activities.

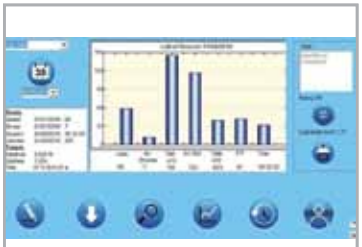
Benin De'Giovanni

BEng(Hons) Mechanical Engineering

e: benininferno@googlemail.com

Investigation into the Energy Efficiency of Launched Rides

Launched Roller Coasters are seen as the future of the Theme Park Industry, but in their current form use large amounts of energy unnecessarily and inefficiently. This project is to analyse current industry trends and seek potential improvements for a more streamlined and efficient system.



Amy Delamere

BSc(Hons) Product Design Technology

e: aedelamere@theiet.org

Swim Training Aid

Once the fundamental learning of swimming is complete, a route to continue progression is fitness training or competition; the use of self-motivation from swimmers is critical. This training aid has been designed to encourage a swimmer's progression and enhance and improve a swimmer's stroke technique, for success.

Boo Wei Fang

BEng(Hons) Mechatronics

e: boo_wei@hotmail.com

Portable 3 Axis Table

This project is to build a 3 axis table by using interface system. A PC will interface with this 3 axis table and using software on the PC, will control the table in XYZ coordinates. 3 stepper motor will be setup at this table and a pencil or pen will replace the router for safety reasons.

David Hill

BEng(Hons) Product Design Engineering

e: sonic_blue_077@live.co.uk

Cutting Edge Garden Equipment with Integrated Technology

The Cutting Edge is a redesign of a lawnmower combined with another tool for the purpose of minimising storage space whilst maintaining performance. The product also includes technologies to improve the performance and usability such as stronger, lighter materials, more efficient power trains or user friendly gadgets.

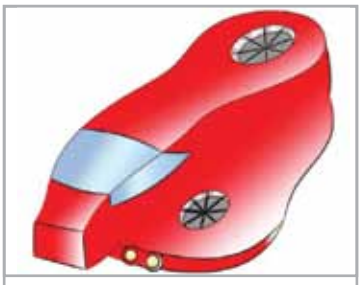
Kudzanai Huni

BSc(Hons) Aeronautical Technology

e: k.d.h@live.co.uk
w: www.TeamCeeGee.com

Pre-Spin Landing Gear Wheels

My final year project is to devise a 3D computer aided design of pre-spin landing gear wheels that work efficiently and conserve the lifespan of tyres on the landing gears. Including the use of computational fluid dynamics software to predetermine and reduce any detrimental aerodynamic forces acting on the wheel.



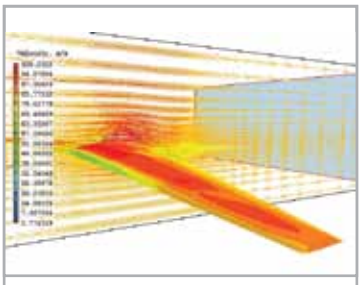
Jamie Joyner

BSc(Hons) Aeronautical Technology

e: jjoyner353@hotmail.co.uk

Conceptual Design of a Multirole VTOL Aircraft

In response to current VTOL limitations, a conceptual design has been developed. The purpose of the design is to provide a flexible, dynamic and innovative VTOL platform to exploit the current market. The design combines vertical and conventional methods of flight, offering capabilities exceeding current concepts.



Anthony Judd

BSc(Hons) Aeronautical Technology

e: anthonyjudd@hotmail.co.uk

The Effect of a Wing Fence on a Forward-swept Wing

Forward-swept wings have increased lift capability at high angles of attack however when stalls do occur the aircraft tends to pitch-up and exacerbate the stall. This project investigates whether the use of a wing fence delays flow separation and, if so, whether the advantages are offset by increased drag.

Ryan Kavanagh

BEng(Hons) Electrical Engineering

e: ryan_kav@hotmail.co.uk

Uninterruptible Power Supply (UPS) Design and Build

The project objective was to design and build a UPS system to protect emergency systems from a loss of power. The final design and prototype incorporates a PWM DC-AC converter, battery charger, voltage monitoring and detection circuits, control loops, step up transformer and protective features.

Wei Kent Hoon

BEng(Hons) Mechatronics

e: hoon_weikent@mail2trex.com
w: www.mail2world.com

Table Top Parallel Robot

A parallel robot, also called a parallel manipulator, is a mechanism presenting very good performance in terms of stability, rigidity and accuracy. Parallel robots can perform in high application tasks and can also be present in the industrial world to save human resources.

Oliver Key

BSc(Hons) Aeronautical Technology

e: olliekey90@gmail.com

Conceptual Design of an Aircraft Using Pusher Configuration

Many countries rely heavily on tourism to boost their economy. This study investigates the use of a pusher configuration on a general aviation aircraft designed for pleasure viewing. This is followed by conceptual design of a new aircraft aimed at entering the aviation market.

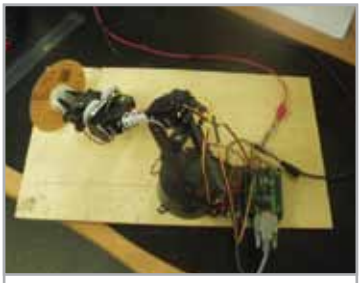
Savvas Kiziridis

BEng(Hons) Mechanical Engineering

e: skiziridis@hotmail.com

Biomass Gasifier Filter Design for Tar Removal

A performance evaluation of a Biomass gasifier filter for tar removal is carried out as part of the ARBOR project (INTERREG IVB). Various filter configurations will be analysed to determine the most suitable configuration and get valuable information for further designs.



Vincent Le Merdy

BEng(Hons) Robotic Engineering

CD Chooser Robot

The main idea of the project is how to help disabled people by using robotic arms, which are more commonly used for factory automation than in the home.

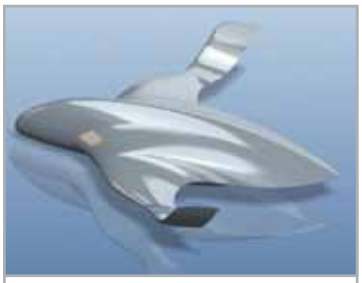
Sumeet Malhi

BSc(Hons) Mathematics and Music Technology

e: sumeet_malhi_1989@hotmail.com

Investigation into Sound Waves to Find the Possibilities

An investigation into the power of sound waves and its abilities. Unless you live in the vacuums of space, sound is all around. Can this sound energy be used for another reason?



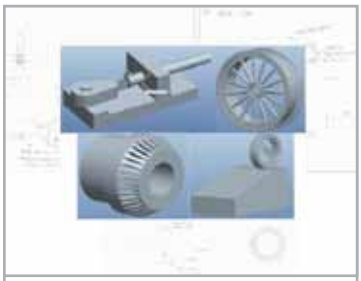
Richard Maybery-Woolfe

BSc(Hons) Aeronautical Technology

e: richardmwoolfe@hotmail.co.uk

Blended Wing Design

To design a concept aircraft of blended wing design suited to commercial airlines that have the capacity to carry 250 passengers over a range of 7000 nautical miles. The aircraft must cruise at close to transonic speed and also be efficient. A CAD model of the aircraft is tested in aerodynamic analysis software.



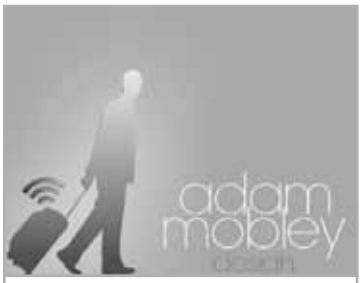
Steven McDowell

BEng(Hons) Mechanical Engineering

e: Stevemcd_1@hotmail.com

A Comparison of Simulation Software Creo and Adams

This project looks at the features Creo and Adams have to offer, with regard to simulations of both simple and complex mechanisms. Through a selection of CAD models, this project aims to outline common problems encountered whilst using the software and provide a recommendation to which would be most suitable.



Adam Mobley

BSc(Hons) Product Design with Management

e: armobley@o2.co.uk
w: adammobleydesign.com

Multifunctional Business Travel Case

The aim of this travel case is to assist with the needs of business travellers when commuting. Through the integration of technology and intelligent design this product targets the modern professional and the associated requirement for carrying a range of belongings in a multifunctional, secure and flexible way.

Ryan Muller

BEng(Hons) Mechanical Engineering

e: ryanmuller@live.co.uk

Optimization of a Compounded Four Bar Linkage Mechanism

Reverse engineering of a pair of surgical wire cutters using Pro-Engineer and Solidworks followed by modification of the mechanisms linkage configuration to yield a higher mechanical advantage.

Jose Paulo

BEng(Hons) Electrical Engineering

Electrical Engineering Modelling and Simulation Techniques

The project will evaluate the effectiveness of computer based electrical engineering simulation techniques. The analysed programs are PScad, Plecsim, Ansys, Multisim, MathLab, PSpice, Labview. Complex electrical system will then be identified identified, and modelled and simulated in PSCAD.

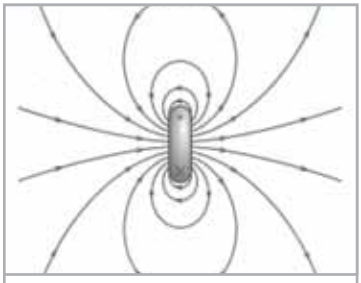
Maria Jose Perez Calvo

BEng(Hons) Mechatronics

e: maria.jose.perez.calvo@gmail.com

Walking System for the Visually Impaired

This concept improves the capabilities of the visually impaired so that they may walk normally without canes or any other devices. A pair of shoes equipped with sonar, infrared and pressure sensors determine the existence of objects above ground level, stairs or slopes by vibrating or making different noises.



John Prout

BEng(Hons) Electrical Engineering

e: Dynamo111@hotmail.co.uk

Generation of Power via Traffic

The aim of the project is to design and implement a novel energy harvesting method that utilises road traffic. The way this can be achieved is with the use of magnetic induction, using the vehicles that pass the system to produce the lateral motion needed in order for an electromotive force to be induced.

Hassan Salam Banayeem

BEng(Hons) Electronic Engineering

e: hbanayeem@yahoo.com
w: www.linkedin.com/pub/hassan-salam-banayeem/27/929/b89

Solar Tracker and Reflector
The best method of improving the performance of solar collection is to increase the intensity of radiation received from the Sun. This can be achieved by tracking the sun and reflecting it on the stationary Solar panels or any desired area, to improve the performance of solar power collection.

Robert Shore

BEng(Hons) Product Design Engineering

e: rob.shore@live.co.uk

Children's Pushchair with Integrated Technology

Pram manufactures are developing new and innovative products but parents still feel that some areas could be improved. This project involves looking at how modern technology can be incorporated into pushchair designs to help make life easier for both parent and child by improving the safety and life span of the product.

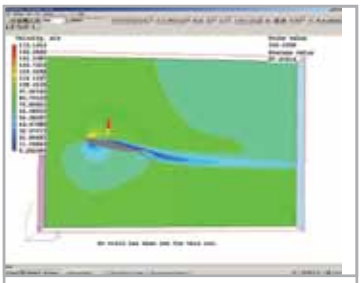
Benjamin Smith

BEng(Hons) Robotic Engineering

e: benjrsmith@hotmail.co.uk

Quadcopter Stabilisation

Developing a Quadcopter. Starting with designing the hardware and interfacing the sensors the project included different filtering techniques for the sensor data and calibrating a PID control mechanism to create a stable system. The goal of the project is to create a stable Quadcopter in flight.



Stuart Smith

BSc(Hons) Aeronautical Technology

e: stuart-l-smith@hotmail.co.uk

Analysis of Aerofoil High Lift Devices

To construct models of varying high lift devices in PTC Creo and to simulate them in CHAM Phoenics in order to establish which high lift configuration is the optimum at delaying the occurrence of aerodynamic stall at varying angles of attack.

Matthew A B Snell

BEng(Hons) Mechanical Engineering

e: Matthew.A.B.Snell@gmail.com

Climbing Gear: Improving the Range of Camming Devices

My project looks at how, by changing the properties of the camming spiral and materials used, increased range can be achieved, allowing greater placement options for individual climbing cams.

Carole Sumner

BEng(Hons) Product Design Engineering

e: cazi756@hotmail.com

Quick Fit Balustrade System

A quick fit balustrade system which has been designed to be easier and quicker to construct than traditional systems available on the market at present. The aim of the project is to allow DIY enthusiasts to construct the balustrade system in their own home as easily as possible to create a professional finish.

Song Sen Tan

BEng(Hons) Mechanical Engineering

e: songsen_tan@msn.com

Fuel Price Comparison Tool

This project is one from the ARBOR project. There are currently various types of fuel being used for heating and power production in domestic level across North West Europe and by having this tool developed, we are able to see the advantages and the disadvantages of the fuel for domestic heating.

Luke Toney

BEng(Hons) Product Design Engineering

e: LTdesign@live.co.uk

Baby Sleeping Unit with Integrated Technology

For my final year project I came to the decision of creating a new product for the baby industry; a new concept for a baby sleeping unit. The unit will incorporate new technologies, which are interchangeable, to monitor the baby while it sleeps and notify the parents' unit.

Steven Twigg

BEng(Hons) Electrical Engineering

e: stwigg@theiet.org

DC-DC Conversion

An investigation into DC-DC conversion techniques (both high power and low power).

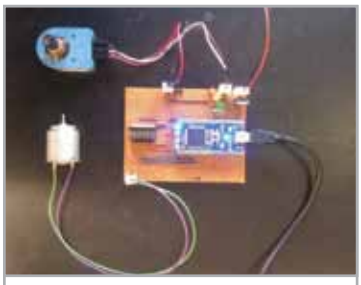
Thomas Weirich

BEng(Hons) Mechanical Engineering

e: thomasaweirich@ googlemail.com

Automatic door opener

3I - Inspiration. Innovation. Implementation door opener for disabled people. In contrast to usual systems this one is not attached to the door but to the walking-aid/ wheelchair of the individual person. As the designed tool will fit to approximately every standard door a high level of flexibility can be provided.



Dean Wood

BEng(Hons) Electronic Engineering

e: deanwood.200987@ gmail.com

Interfacing and Control of a Cable Driven Low-cost Robot Arm

A gripper is moved to a position by the changing of lengths of attached cables. This project implements a control system designed to accurately control the length of the cables by making use of an embedded microcontroller circuit and PID control software, to achieve precise feedback and measurement of cable length.

Martin Woodcock

BEng(Hons) Electrical Engineering

e: martin.woodcock@ amey.co.uk

The Evaluation / Application of Electroluminescent Lighting

The project presented evaluates electroluminescent lighting technology against traditional forms of industrial lighting utilising proven techniques and methods. The analysis results have been utilised to apply electroluminescent technology within a road tunnel emergency signage application.

Siang Yang Chew

BEng(Hons) Mechanical Engineering

e: sychew.alex@gmail.com

A Hemiplegic Wheelchair

This is a foldable wheelchair that is especially designed to promote to a hemiplegic person who is unable to move one side of their body. The wheelchair is mainly function by a gear box that contains a set of differential gear, ratchet gear, and a sprocket/spur gear.

Ashley Zagarella

BEng(Hons) Electronic Engineering

e: zaga1588@yahoo.co.uk

Solar Photovoltaic System Design, Install and Evaluation

Design, commissioning and evaluation of an 18.24kWp solar photovoltaic system to meet carbon management commitments. The building aims to become the first carbon neutral commercial office in the UK after the photovoltaic installation. There is also a test rig which aims to prove the benefits of DC power, over AC and gas

Lee Egginton

BSc(Hons) Electrical and Electronic Technology (Part-time)

Energy Efficiency of a Concrete Mixing Plant

To carry out an assessment of the energy used and wasted during the production of ready mixed concrete and to determine solutions to make energy efficiency improvements.

Rowan M. Ashe

BSc(Hons) Film Production Technology

e: contact@rowanashe.com
w: www.rowanashe.com

An Investigation into Camera and Lens-based Techniques

Researching methods used to create visuals that produce powerful cinematic storytelling together with the development of specialist lens technology, provides a unique understanding of modern filmmaking. This research has been applied through the development of a portfolio piece - a short film titled 'The Affliction'.

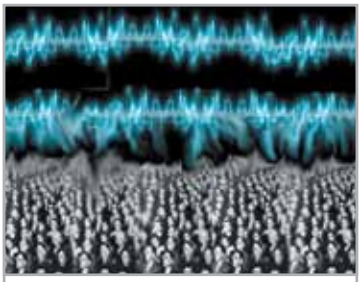
Michael Beech

BSc(Hons) Film Production Technology

e: mikebeech@me.com

An Investigation into Lighting Resulting in a Short Film

An investigation into the different aspects of lighting within film, resulting in a short film about a woman's struggle with grief over the loss of her partner in Afghanistan.



Rachel Begley-Renner

BSc(Hons) Digital Film and Post Production Technology

e: Rachelb-r@hotmail.co.uk

Investigating Audio Manipulation on Visual Perception

Researching how sound can be used to manipulate an audience through film, advertising and TV. Various testing methods in this project will find how people react to certain sounds and how they relate imagery to sound.

Victor Casambros

BSc(Hons) Film Production Technology

e: vic@vcasambros.com
w: www.vcasambros.com

Investigation into Advances of Mobile Recording Technology

A dissertation looking at how technological advancements and convergence has impacted on the way people share and record events.

Navneet Chahal

BSc(Hons) Digital Film and Post Production Technology

e: navneet_01@hotmail.co.uk

An Investigation into Editing Techniques

I am going to be testing editing techniques adopted by notable directors and producers and then produce, direct and edit a short film in the style of either Hitchcock or Tarantino.

Benjamin Chapman

BSc(Hons) Film Production Technology

An Investigation into Camera Movement

An investigation into the different aspects of camera movement within film production, resulting in a short film showcasing the techniques learnt.

Matthew Clements

BSc(Hons) Film Production Technology

e: mattpgclements@aol.com
w: vimeo.com/matthewclements

An Investigation into Cinema Camera Technology for TV

This project critically tests and analyses broadcast and cinema camera, such as the Arri D21, Alexa, Red One MX, EPIC M, Sony F3 and the D MkII. The project additionally looks at the impact of Super 35mm Camera on the market, and cross compares to their larger variants.

Andrew Coulton

BSc(Hons) Film Production Technology

e: andrew@sortedmedia productions.com
w: www.sortedmedia productions.com

Technical Difficulties of Documentary Production

An investigation into the technical difficulties of producing a documentary, where research, testing and practical application developed a thorough understanding of technical production, including appropriate camera systems and set-ups, audio recording methods, lighting design and other documentary techniques.

Richard Cullen

BSc(Hons) Film Production Technology

e: richard_cullen89@hotmail.com
w: http://vimeo.com/richyc89

Directing Visual Narrative through the Medium of Film

An exploration into the processes of directing a visual narrative through the medium of film. Following the film making journey from concept to screen and discussing the decisions a director must make through various stages of the process. Including the many types of visualisation and directing techniques available.

Nicola Dale

BSc(Hons) Film Production with Music Technology

e: nl.dale@blueyonder.co.uk

Investigation into the Importance of Sound and Sound Design

The project will look into the importance of sound design as an individual medium reflecting upon its importance to the vision and also how it can create an image in its own right. With research on soundscapes, 5.1 mixing, binaural audio and so on to apply to sound and sound design.

Jack Deacon

BSc(Hons) Film Production Technology

e: jack@sortedmedia productions.com
w: www.sortedmedia productions.com

Digital Film for Broadcast Delivery

To research current processes within production to ensure a film or programme for television passes broadcast specifications and why certain cameras (specifically DSLRs) are not recognised as broadcast standards.

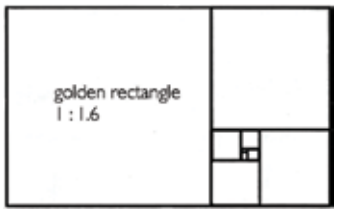
Charlie Delaney

BSc(Hons) Digital Film and Post Production Technology

e: charliejdelaney@live.co.uk

Production and Editing of Digital Film and Video

The project is focused on the editing and production of a short film. It is a documentary style film shot using DSLR about skateboarding and urban lifestyle set in Nottingham.



Alexander Dewhirst

BSc(Hons) Film Production Technology

e: alexdewhirst@gmail.com
w: www.vimeo.com/robotcamelfilms

Camera Composition Techniques for Narrative Effect

The investigation looks into visual image composition and the effect it has on the narrative of visual media, more prominently film. The aim is to gain a better understanding of composition and its application to visually creative mediums such as painting and illustration, photography and moving images.

Colin Foulkes

BSc(Hons) Film Production Technology

e: colinfoulkes@gmail.com

Traditional 35mm Film Looks for the Digital Cinema Era

This project is aimed towards becoming a colourist: experimenting with looks and creating a portfolio showcasing the reproduction of various styles of traditional film stocks; their colour, grain and texture when using footage sourced from digital cameras.

Brendan Goss

BSc(Hons) Film Production Technology

e: brendan_goss@msn.com

Comedy Gigs

When stand-up comedy goes wrong. 'COMEDY GIGS' is a new programme for television that looks at the bottom end of the country's stand-up comedy industry, the kind of comedy gigs that people often find themselves misfortunate enough to experience when out for just a quiet pint. Not for children.

Robert Hull

BSc(Hons) Film Production Technology

e: robhull.films@gmail.com

A Technical Investigation into Point and Shoot Technology

Almost everyone has a point and shoot camera these days. Whether it's a camcorder, camera phone or a digital stills camera, this kind of technology has become integral to our lives. How can this technology be used in ways that professional cameras could not be used to create new kinds of cinema?

Charlotte Hunt

BSc(Hons) Film Production Technology

e: charlotteelizabethhunt@gmail.com

An Investigation into Women in Cinema

An investigation into Women in cinema, and how film technology and film language effects female audiences and filmmakers.

Bentley Hunter

BSc(Hons) Film Production Technology

e: bentleyhunter@hotmail.com

Live Action Special Effects in Micro-budget Filmmaking

There are many technical and logistical challenges that face ambitious creative visions when filmmakers attempt to liberate themselves from budgetary concerns. However, accessible resources and techniques have the potential to do for live action special effects what the DSLR camera has done for amateur filmmaking.

Emily Hyam

BSc(Hons) Film Production Technology

e: emhyam@aol.com

Cinematography of the Contemporary Fairy-Tale

Studying Cinematography through production and post to create a modern day fairy-tale with a dark twist based on the classic: 'Little Red Riding Hood'.

Laura Johnson

BSc(Hons) Film Production Technology

e: lauraemily.johnson@hotmail.com
w: www.facebook.com/ASoldiersWarMovie

A Soldier's War

This project aims to investigate different focal techniques used in short film, and how they can be used to effect the emotions of an audience.

Luke Julian

BSc(Hons) Film Production Technology

e: lukejulian@hotmail.com

Paper Hearts: Torn Together, Ripped Apart

This project attempts to bring to life the story of two paper figures which come to life having been roughly torn from the pages of a newspaper. The pair immediately fall in love but their romance is cut short at the hands of an evil, cynical woman who crumples one of the characters up and leaves her for dead.

Zoe Lawson

BSc(Hons) Film Production Technology

e: cat17@hotmail.co.uk

An Investigation into the Animation of a Music Video

The purpose of the project is to investigate stop motion animation techniques within the music video genre. Through research into set construction, background compilations and compositing techniques, a music video will be developed.

Simon Linsley

BSc(Hons) Film Production Technology

e: si@simonlinsley.com
w: www.simonlinsley.com

Alternative Methods of Funding Your Film

The way films are made is changing and so is how they are financed. The project identifies alternative methods of film finance and practically implements one method to fund the short film, Everett Hall.

Nick Lunn

BSc(Hons) Film Production Technology

e: nick_lunn_7@hotmail.com

Gangster Cinematography: 'The Heist'

'The Heist', a demonstration of my investigation into Cinematography Technology within the Gangster genre, specifically focusing on the cinematography of Get Carter (1971), Goodfellas (1990) and The Town (2010).

Sumanpreet Matharu

BSc(Hons) Film Production Technology with Management

e: smatharu11@gmail.com

'Bas Ek Din' A Bollywood Film

A technical investigation into how to create a traditional love story Bollywood film, looking into the process from pre-production all the way through to post. Is there any difference in regards to the preferred filming methods in Hollywood to Bollywood?

David Nicholas

BSc(Hons) Film Production Technology

e: dave@dknicholas.com
w: http://dknicholas.com

FilmTogether - a Collaborative Online Filmmaking Community

FilmTogether is an experiment in filmmaking through online collaboration. Based upon open source principles, the project attempts to gather a web community of people willing to collaboratively produce short films through an open process.

Ruaidhri Nolan Mac Giobuin

BSc(Hons) Film Production Technology

e: ruaidhrinolan@gmail.com

One Shot Music Video

A one shot music video that will consist of one continuous shot, there will be no cuts, post-production will only involve a colour grade and compression.

Sarah O'Connor

BSc(Hons) Film Production Technology

e: oconnor.sarah5@gmail.com

A Technical Investigation into Documentary Production

The project investigates into modes of documentary creating a hybrid piece. The documentary will focus on alcohol and how it can ruin a life.

Daniel O'Hare

BSc(Hons) Film Production Technology

e: dnohare@gmail.com

Our Palace - A Documentary

An investigation into the production and distribution of an independent documentary film in the form of a dissertation and short film.

Jonathon Perry

BSc(Hons) Film Production Technology

e: pymoorjonnie@hotmail.co.uk
w: jonathonhperry.tumblr.com

Investigation into the Video Production Limitations of DSLRs

An investigation into the new breed of DSLRs that can shoot HD video: investigating the quality of material they produce and how they have made the creation of film like aesthetics easier for amateurs.

Matthew Playford

BSc(Hons) Film Production Technology

e: mattplayford@btinternet.com

'Take Me' Music Video

An extended narrative based music video for the song 'Take Me' by the band Of Verona.

Charlotte Prior

BSc(Hons) Film Production Technology

e: chaz141189@hotmail.com

An Investigation into Colour in Underwater Videography

This project is all about the skills and techniques it takes to film underwater in a natural environment.

Sidari Reddy

BSc(Hons) Digital Film and Post Production Technology

e: kusanagi@live.co.uk
w: http://vimeo.com/user4910515

An Investigation into World Wide Editing Styles

After watching Asian cinema all through last summer, I decided to be brave and try to create my very own Japanese film. I decided to use not only the editing styles used but the language as well which is difficult as I don't know any Japanese!

Eleanor Risdon

BSc(Hons) Film Production Technology

e: erisdon@hotmail.com

An Investigation into the Merging of Film and CGI.

A short film that effectively merges together elements of 3D and computer generated images with film.

Ethan Roberts

BSc(Hons) Film Production Technology

e: ethanjoshuaroberts@gmail.com
w: www.gardenback.com

Theories of Consciousness in Cinema

An investigation into theories of consciousness and their representations within cinema.

Chavonne Rudd

BSc(Hons) Film Production Technology

e: cl-rudd@hotmail.com

How Sound Design Evokes Emotion within an Audience in Film

In this project I am looking at how sound design evokes emotion and using this information I am applying it by using binaural sound in a short film.

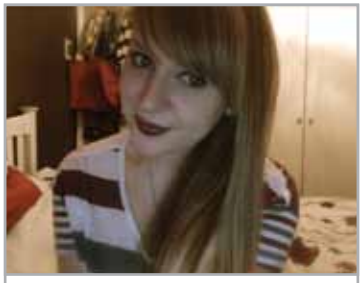
Karan Sakchiraphong

BSc(Hons) Film Production Technology

e: karanbiz@hotmail.com

An In-depth Research into Lighting and Camera Techniques

The project is aimed towards becoming a cinematographer. Ways to demonstrate an understanding of lights and camera techniques in film through the creation of a short film titled "Smoke 10".



Nichola Searle

BSc(Hons) Film Production Technology

e: n1chola@hotmail.co.uk

'Two Unlikely Lovers'

The project is a short film, that shows the developing online relationship between a 17 year old girl (Hannah) and a 25 year old inmate (Stephan). Showing the female character becoming increasingly fond of this man that she really doesn't know. The relationship builds until the final twist at the end of the film.

Mark Smith

BSc(Hons) Film Production Technology

e: marksmail121@gmail.com

An Investigation into an Audiences' Relationship with Colour

An investigation into how we perceive colour, its origins, and how it's being used within film today.

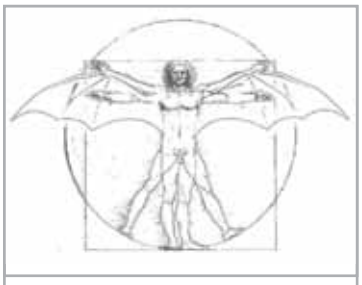
Carina Isabelle Theissing

BSc(Hons) Film Production Technology

e: carina.theissing@gmail.com

Radio Drama Production

A radio drama can be described as a performance on radio which is purely acoustic. This means because of no visual assistance the drama has to trust in music, sound effects and voice actors' dialogue to help the audience create their own images in their mind.



Charlotte Conopo

BSc(Hons) Games Concept Design

e: charlotte.conopo@hotmail.co.uk

The Amalgamation of Monsters

Concept art project within the area of Greek Mythology. Blending humans and animals together to create an original character from a choice of 3 very different creatures.

Lauren Crerand

BSc(Hons) Games Concept Design

e: laurencrerand@mac.com
w: http://spank-me-elmo.deviantart.com/gallery/

Pokemon to Realism

Applying Believable Biology to Pocket Monsters.

Gagan Deep Singh

BSc(Hons) Games Concept Design

e: gagan@gdsworld.co.uk
w: www.gdsworld.co.uk

Realistic Character Rendering for VFX

The project focuses on rendering a realistic character for VFX. Areas such as Lighting, Skin complexity, Uncanny Valley, Shaders and Print will all be researched to find the best possible solution to render a believable character. The end product will be 2 x A2 printed promotional posters.

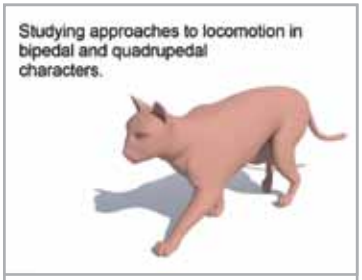
Sanchia Farman

BSc(Hons) CGI and Animatronics

e: sjfarman@hotmail.co.uk

An Investigation into Creating a Geological Simulation

The investigation will look at how effective Autodesk Maya's particle system is in creating such a simulation, and how it can be improved when used in conjunction with other software.



Matthew Henry

BSc(Hons) Digital Film and 3D Animation Technology

e: mateo899@hotmail.co.uk

Studying Locomotion in Bipedal and Quadrupedal Characters.

The project is focused on locomotion within bipedal and quadrupedal characters and the 3D animation techniques that are to be implemented to recreate such characters in a realistic manner.

James Hughes

BSc(Hons) Games Concept Design

e: james_h_1990@hotmail.co.uk

Investigation in Creating a Portfolio for a Concept Artist

The project's aims are to study a range of classical and contemporary artists and provide a range of digital drawings from concept through to a finished final beauty shot. The project will develop skills in traditional artistry, 2D and 3D painting and digital sculpting.

Trystan Lang

BSc(Hons) Digital Film and 3D Animation Technology

e: t.lang@live.co.uk

The Integration of Merging CGI with Film

This project looks into the process of matchmoving to combine CG objects and film footage to create a television ident. It integrates the CG objects through the use of matchmoving, compositing and lighting techniques to achieve a seamless blend between them.

Jonathan Nevill

BSc(Hons) Games Concept Design

e: JRJNConcepts@hotmail.com

Anatomy for the 3D Artist

Anatomy for the 3D Artist aims to construct a layered 3D visualisation of the human anatomy with the main focus on reference for the artist. Core structures of the human anatomy have been digitally replicated using a combination of 3D scanning and 3D applications including 3ds Max and Zbrush.

Mark Olley

BSc(Hons) Digital Film and 3D Animation Technology

e: markolley1991@
googlemail.com
w: www.markolley.co.uk

An Investigation into using CGI within a Short Film

This project focuses on combing Computer Generated Imagery with Live Action Footage. The aim of the project is to create a short downhill mountain biking film which combines cinematic camera movements with Computer Generated Imagery which helps to explain the technical aspects of the sport.

Miren Patel

BSc(Hons) Film Production Technology

e: miren.vp@gmail.com
w: www.youtube.com/
AizenDigital

VFX Trailer

A short trailer comprised of VFX shots for a sci-fi film concept. This project takes into consideration everything to create an epic breath taking shot. This isn't just VFX... This is Film.

Saeid Samimi

BSc(Hons) Film Production Technology

e: saeid88uk@yahoo.co.uk
w: http://vimeo.com/
saeidsamimi

Angels Rebirth

Angels Rebirth is a short film made by Saeid Samimi. The short film uses documentary style of story telling to tell a narrative about a world that is dangerously close to nuclear war. Short film uses cinematography and visual effects to achieve a high standard in filmmaking.

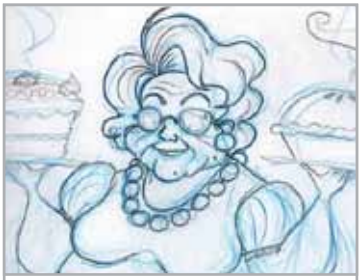
Emma Tyson

BSc(Hons) Digital Film and 3D Animation Technology

e: e.tyson@hotmail.co.uk

Animating Personality and Emotion into Inanimate Objects

How can a key character in an animated film be nothing more than a rectangle? Take the Magic Carpet in Disney's Aladdin. I investigated how inanimate objects can be animated successfully to give a real sense of personality, character and emotion by exploring personality theories, animation, lighting and storytelling.



Katheryn Ward

BSc(Hons) Games Concept Design

e: katward26@
googlemail.com
w: katward26.deviantart.com

Developing Literary Characters for Animated Movies and Games

This project is based around taking characters from literary works such as fairytales or classic stories and adapting them for animated movies or games. The main focus is a set of concept character designs appropriate for a Disney-style animation.

David Jackson

BSc(Hons) Games Concept Design

An Investigation into Morphing Techniques for Commercial Purposes

This project concentrates on the history and evolution of image and video morphing. Different techniques were investigated and tested, resulting in one being chosen to produce a music video for the final piece. This piece contains various people morphing into one another, totalling eight separate video morphs.

Zohabe Aziz

BSc(Hons) Computer Games Design

e: karmachild17@hotmail.co.uk

Developing Games to Stimulate Residents with Dementia

This project searches for possible ways to create a game suitable for people with Dementia. Dementia has many long-terms affects so hopefully this could stimulate people with the disease. With the final product this will be presented and explained to an audience to test it and gain their feedback.

Michael Beardsell

BEng(Hons) Computer Gameplay Design and Production

e: agato369@googlemail.com

Procedural Environment Generation in UDK

Study into techniques used in procedural environment generation, and experimentation of those techniques in UDK.

Sarah Blackburn

BEng(Hons) Computer Gameplay Design and Production

e: sblackburn@live.co.uk

The Life Cycle of a Survival Horror Game

When horror games aren't scary anymore, you know there's something wrong. This project investigates the horror game genre, examining what techniques do and don't work and testing these on their potential audience. This will lead to the creation of a new, potentially 'scary' horror game.

Jason Botcherby

BSc(Hons) Computer Games Programming

e: t_5000@hotmail.com

Creating a Prototype Fighting Game in UDK

Using UDK and uScript to create the basic gameplay functions of a fighting game.

Andrew Brewster

BEng (Hons) Computer Gameplay Design and Production

How Lighting Guides Players through Levels

Lighting in video games is an element of games design that is often overlooked. It is a powerful asset a level designer can be used to guide a player in the right direction. This project looks at lighting in video games and primarily how it is used to guide players through interior 3D environments.

Jonathon Brocklehurst

BSc(Hons) Multiplayer Online Games Design

e: Jonathonbro@gmail.com

Future Trends and Predictions for the MMO Market

Research into the history, development and changes within the MMO market from the 1st MMO to current developing MMO's, then by using this information I will be able to write trends and future predictions for each different areas that are covered within the MMO market.

Christopher Broomhall

BSc(Hons) Computer Games Design

e: christopherbroomhall@live.co.uk

Investigation into Character Design in the Games Industry

This project is an investigation into the production pipelines that professionals in the video games industry follow to create character models - for use in modern games engines.

Alastair Brown

BEng(Hons) Computer Gameplay Design and Production

e: acbrown0001@live.co.uk

Simulation Training for Military Purposes

Through using the Unreal Development Kit this project shows if a modern day games engine can be effectively used as part of military/emergency response training at a low cost, by outputting accurate real world simulations using combat scenarios for military training and a negotiation scenario for police training.

Benjamin Burns

BSc(Hons) Games Audio Design

e: benburns17@googlemail.com
w: http://noobsounds.blogspot.com/

The Sound of Good and Evil
How can a player's perception of a character, in terms of good and evil, be influenced through the use of instrumentation and tonality, via the medium of video games? Are some instruments or ensembles seen as intrinsically good or evil and why? How can we apply this to help us achieve a better interactive experience?

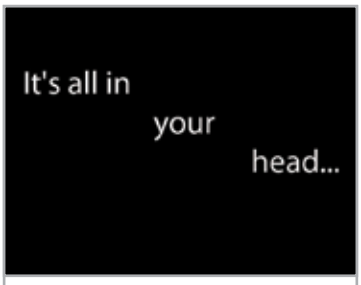
Alex Byrom

BSc(Hons) Multiplayer Online Games Design

e: s.g.talex@live.co.uk

A Narrative for In-game Dynamic Story Telling

A narrative for in-game dynamic story telling. An investigation into how narrative affects game play and whether a game can be built around the narrator's perspective VS the players choices. The plan is to use as much sensory interaction as possible as well as the narrator talking you through the game.



Matthew Calvert

BSc(Hons) Games Audio Design

e: megadudeman@hotmail.co.uk

Can an In-depth Narrative be delivered by Audio Alone?

This project will demonstrate how audio can portray the narrative of a game. Looking into such things as how audio can be presented in the games space in which the visuals of high graphics cannot, to giving a bigger world in the players mind.

Andrew Clark

MEng(Hons) Computer Games Design

e: andrew_c99@hotmail.co.uk
w: aclark.atspace.co.uk

Believability as a Result of NPC Dialogue and Conduct

This project looks at just how and to what extent NPC dialogue and conduct can be utilized for the purposes of producing characters that are believable and rewarding to interact with. The project looks at how such characters are both designed and implemented.

Tom Constable

BEng(Hons) Computer Gameplay Design and Production

e: tom_constable@live.co.uk
w: http://tomconstable.blogspot.com

How Narratives can be Communicated through Game Environments

This project is an investigation into environmental storytelling techniques. With a focus on how these methods can be utilized to improve the communication of narratives through game environments.

Lucas Courtney

BEng(Hons) Computer Gameplay Design and Production

e: lcourtney87@gmail.com
w: www.codemonkey87.co.uk

Investigation into Gesture based Gameplay

By incorporating a controller with the Kinect's NUI the projects intention is to improve players connection to the virtual world and provide a basis for enhanced gameplay features.

Christopher Damon

BEng(Hons) Computer Gameplay Design and Production

The Use of Key Real World Aspects in an Otherworldly Setting

Game worlds can either be based on reality or fantasy with the latter having more freedom in the design process. But by applying key aspects from our own planet and society into the design of an otherworldly setting, the game world can become more believable in the process, despite being out of this world.

Nathan Davis

BEng(Hons) Computer Gameplay Design and Production

e: Nathandavis2003@hotmail.com

Conversion of a Blockbuster Film into a Playable Experience

This project is based around how films are converted into games and making it an playable experience.

Nicholas Edwards

MEng(Hons) Computer Games Design

e: NickEd90@hotmail.co.uk
w: www.nicholascedwards.co.uk

Representing the Psychology of Warfare in Game Mechanics

The psychological element is one of the main factors in understanding warfare, but due to its unpredictable nature is seen as something unquantifiable that cannot yield to simulation. This project aims to change this by developing a way to represent this unpredictability through game mechanics by using fuzzy logic.

Danton Farmer

BSc(Hons) Games Audio Design

e: dantonmccreadie@sky.com

Retrospective into Narrative in Games and Potential Future

This is a retrospective view of narrative in games from the past three decades and theorizing future methods of delivering narrative content to players. Game genres identified range from role-playing games, text adventures, visual novels, and survival horror.

Renn Farnell

BEng(Hons) Computer Games Design

e: rennfarnell@gmail.com

An Investigation into Surrealism within Game Design

This project aimed to justify the use and existence of Surrealism within Game Design, supported by the claim that Games supply the perfect medium to experience "Wish Fulfillment". The project asserted that the application of Surrealist themes during Game Design and Development can create exciting and innovative games.

Peter Farrow

BSc(Hons) Computer Games Design

e: pjfarrow88@gmail.com

The Re-Creation of 'Film Noir' in a Game Environment

A re-creation of the famous film style 'Film Noir', in a real time game environment using the 'Unreal Development Kit' Including a lighting solution that, while creating a 'high contrast' scene, it also allows the player to navigate around it while keeping the lighting true to the style it's based on.

James Griffiths

BEng(Hons) Computer Gameplay Design and Production

e: griffiths562@gmail.com

Investigation into Illusions within Game and Game Engines

Taking advantage of modern game engines, this project aims to create a number of demos introducing new techniques to create complex and believable illusions.

David Hatton

BEng(Hons) Computer Gameplay Design and Production

e: davidahatton@hotmail.com
w: www.linkedin.com/pub/david-hatton/25/687/20

The Translation of Console Games to Mobile Devices

An investigation into the translation of console games to mobile versions. Examining HCI techniques used across forms of popular media, target audiences and mass markets and creating a suitable interface design for a mobile based game.

Lee Henderson

BSc(Hons) Computer Games Design

e: lee.henderson.3d@gmail.com

How Behaviour Influences the way Players Engage with a Level

An investigation into the most effective way to induce engagement and motivation of a player by comparing the use of intrinsic and extrinsic rewards.

Bradley James

MEng(Hons) Computer Games Design

e: bsjkupo@hotmail.com

How Reward Systems Affect a Player's Gaming Experience

This project aims to understand what reward systems are being used in current video games and why they are being used in that way, also, how these systems affect the player, culturally and socially, and what a player keeps from the experience of these systems (whether good or bad).

David Knight

BEng(Hons) Computer Gameplay Design and Production

e: DaveRune.DK@Gmail.com

Non-Euclidean Level Design Effects on Multiplayer Gameplay

An exploration into the many ideas and ways of distorting a player's perception during gameplay and still making sure it's fun to play. Techniques will be implemented into a multiplayer combat scenario and a set of produced guidelines on what works to disorient players and produce a successful illusion.

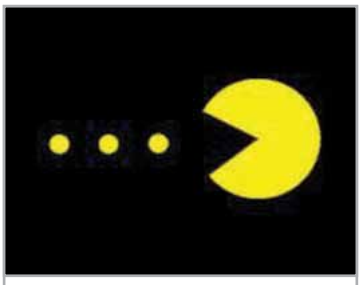
Sarah Lake

MEng(Hons) Computer Games Design

e: sarah.lake89@gmail.com

Modular Game Design Documentation

Design documentation is important when conveying ideas and information within a company, even more so when having to outsource. Many companies have moved on from paper based copies and are using electronic copies to ensure fast communication. But how can each employee ensure they receive all the information they need?



Thomas MacRae

MEng(Hons) Computer Games Design

e: tommacrae@hotmail.co.uk

Retro Design Principles in Modern Games

This project looks at both present day games and games of the past to discover how games have changed from their conception. This thesis looks not just at the advancement of 3D visuals and presentation but also at what is considered retro and a look at the video game market and industry.

Ricardas Misickinas

BSc(Hons) Computer Games Design and Programming

e: funksas@yahoo.com

Assessing the Difference between Analogue and Digital Games

Attempting to develop digital and analogue game based on the same concept and assesses the difference between them.

Dean Morgan

BEng(Hons) Computer Gameplay Design and Production

e: superdean20@hotmail.co.uk

How can Psychology be utilised to create an Immersive Game?

The project is about researching psychology and narratology and finding a common ground where both can work together to create an immersive, interactive story in a game.

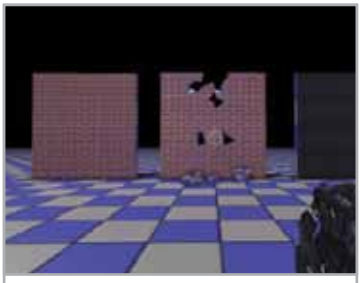
Ashley Morgan

BEng(Hons) Computer Gameplay Design and Production

e: ash@ranooth.com
w: www.ranooth.com

Production Methods in Quality Assurance and Games Testing

A look at the current state of games testing in the industry and what problems plague the process in game development. Using research, feedback from the industry and other sources a production document outlining how to streamline the testing process and maximize output from testers will be produced.



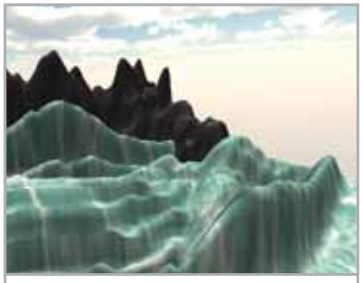
Tom Morgan

BEng(Hons) Computer Gameplay Design and Production

e: tommorgie@hotmail.co.uk

Real Time Ageing and Weathering Effects in Games

This project researches into the different techniques used to create game textures. Using these techniques to create a base, effects will be produced within UDK and Photoshop to create real time degrading effects such as ageing and weather. Gameplay will then be designed focusing upon this.



Dominic Nash

BEng(Hons) Computer Gameplay Design and Production

e: pixeldead@hotmail.co.uk

Deformation of Dynamic Environments

As a medium, video games offer the unique aspect of unpredictability despite repetition. Therefore, the integration of physically dynamic environments can be used to change the flow of play, leading to events that are utterly significant and unplanned, creating an experience completely individual to each player.

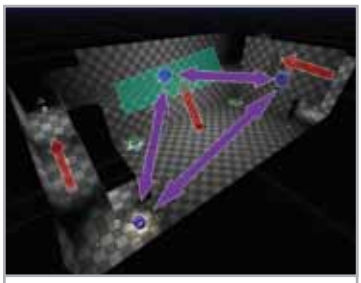
Ryan Pearson

BEng(Hons) Computer Gameplay Design and Production

e: ryanpearsongames@gmail.com
w: https://sites.google.com/site/ryanpearsongamesdesigner/

Methods for Monetizing a Deck Building Game

This project researches the methods of monetization in games and the effect it has on the profits. The most appropriate monetizing method will then be incorporated when designing a digital deck-building card game; though the prototype produced will be physical.



William Peverell

BSc(Hons) Computer Games Design

e: will.peverell@live.co.uk

Investigation into Player Interest in Environment Design

Investigate into the creation of an area for a game, which will keep the player interested in staying within that location. Then create this environment to be playable within the Unreal engine.

Jake Pisuto

BEng(Hons) Computer Gameplay Design and Production

e: j10p16@hotmail.co.uk

Games and the Imagination

Immersion in games is considered by some to be one of the most important parts of a game and one of the leading factors in why people buy and play video games. This project looks into how immersion is created and how our imagination can be used to enhance a player's gameplay experience.

Ross Richards

BSc(Hons) Computer Games Design

e: rprichanim@gmail.com
w: www.youtube.com/user/RossRichardsAnimator

Combining Motion Capture Animation with Dynamic Physics

This project focuses on creating realistic animation for a character by using motion capture techniques in combination with real-time physics. The character will also be fully playable in a game engine to showcase the entire animation set.

Thomas Roberts

BEng(Hons) Computer Gameplay Design and Production

e: thomasedwardroberts@live.co.uk
w: http://draxov.tumblr.com/

Prototyping Adaptable AI Director Systems

Research into the AI director concept in video games from a games design point of view. Looking specifically at the design, how it is implemented, what difference it can make on gameplay and how it could be developed further. In conclusion providing a practical demonstration of the AI director

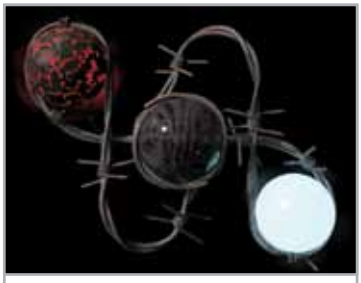
Matthew Sherman

BSc(Hons) Computer Games Design

e: matthew_bfg2k@hotmail.com

Theory of Alternative Games Narrative

This project will establish a framework to assess the various alternative narrative elements in games for their effectiveness in providing an engaging experience for the player. It will present a game design document that uses some of these narrative elements as key aspects of its design.



Thomas Skuse

MEng(Hons) Computer Games Design

e: mrtskuse@gmail.com
w: www.tskuse.co.uk

Player-Character Engagement in Games

This project explores the connection between a player's engagement with their character and enjoyment of a game. Investigating and testing methods to increase player-character engagement through a custom analogue RPG tentatively named Sorrow. The findings have applications for digital games.

David Smith

BEng(Hons) Computer Gameplay Design and Production

e: david@aguycalleddave.co.uk
w: www.aguycalleddave.co.uk

Designing Active Cinematic Experiences in Games

Exploring the relationship between Game Design and Narratology with regards to the problems faced when creating Cinematic Gameplay. These multidisciplinary techniques are then used to create guidelines for game designers to follow and are demonstrated in a playable game demo.

Paul Spencer

BEng(Hons) Computer Gameplay Design and Production

e: Paul@Paulyo.co.uk
w: Paulyo.co.uk

Making Good Teams Great

The project addresses a variety of production, leadership and management issues that continually arise throughout a game's development cycle whilst tackling how to effectively communicate and work within a team.

Andrew Standen

BEng(Hons) Computer Gameplay Design and Production

e: adstanden@hotmail.co.uk

Balancing Gameplay with Historical Realism in RTS Games

Looking into what makes a historical real time strategy game realistic and the gameplay mechanics used to achieve this. The final aim will be to create a design document for an ideally realistic historical RTS game.

David Symonds

BSc(Hons) Computer Games Design and Programming

e: creators_16@hotmail.com
w: sukura636.wordpress.com

How do Players Relate to In-game Avatars?

Through research I have tried to determine what makes good, relatable game characters, and then used this to develop a system that can create a group of characters suitable for an RPG game.

Ricardo Teixeira

MEng(Hons) Computer Games Design

e: demoproud@hotmail.com
w: http://demoproud.com.sapo.pt

Real Time Physics and Emergence in Games

This projects looks at how real-time physics simulation in game engines has taken steps for emergent gameplay, and why it has become a vital part of current AAA titles.

Christopher Walden

MEng(Hons) Computer Games Design

e: christopher.walden@hotmail.com
w: www.chriswalden.co.uk

Making a Game Personal via Player Emotion
A common complaint regarding video game narratives is that players can sometimes feel indifferent towards them. Many stories that are praised highly are down to the audience being able to relate to the characters and events included, so why not tailor a story specifically to make a unique and personal experience?

Rachel Watkins

BEng(Hons) Computer Gameplay Design and Production

An Investigation into Fitness Games and Player Weight

Do games make you fat and can they make you thin?

Thomas Whittemore

BSc(Hons) Multiplayer Online Games Design

e: tomwhittemore@hotmail.com

How can Destructible Technology Create Multiplayer Gameplay

In a multiplayer level how can destructible technology be used to create unique gameplay tactics?

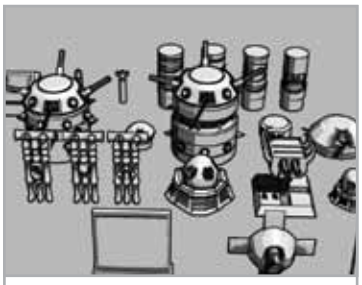
Lisa Wilson

BEng(Hons) Computer Gameplay Design and Production

e: Lisa.Wilson228@hotmail.co.uk

Investigation into Realistic Expressions in Modern Games

The primary aims of this project were to investigate human mannerisms and body language of game characters and how this affects the overall game narrative, whilst also gaining relevant technical knowledge concerning the creation of characteristics in modern gaming media.



Darren Bailey

BEng(Hons) Computer Games Design

e: dbailey2004@hotmail.com

Redevelopment of 2D Game Environments for UDK Mobile

The project will focus on taking 'Rock n Roll Racing' from the SNES, and redeveloping the environments within the game for use with UDK Mobile.

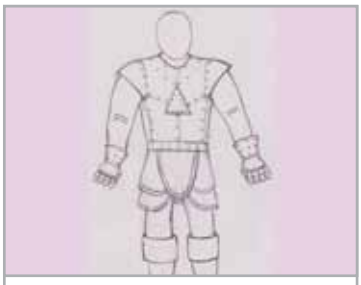
Christopher Barnes

BSc(Hons) Computer Games Design

e: chris.s.barnes@live.co.uk
w: www.chris-barnes.com

Efficiently Creating a Realistic Game Environment

This project investigates the available features of a current generation games engine and how they can be utilised to create an advanced gaming environment. The aim is to create a realistic environment that runs efficiently, making use of techniques such as modularity within the Unreal Development Kit.



Jonathan Botcherby

BSc(Hons) Computer Games Design

e: jonathan_botcherby@hotmail.com
w: jonathanbotcherby creations.wordpress.com

Creating and Animating a Game Character to Use in a Cutscene

A game cut scene which contains an environment modelled and textured from scratch and a fully modelled, textured and animated character.

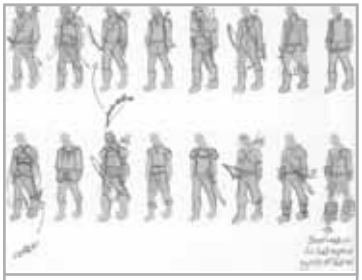
Madina Chionidi

BSc(Hons) Digital Film and 3D Animation Technology

e: madina.2000@yahoo.co.uk
w: madina88.carbonmade.com

Game Cinematic Character Creation

Pre-rendered cinematics are not rare in modern games as this technology can deliver high quality results. This project involves an investigation into design and creation of a convincing, up - to - industry - standard character that can be used in an in-game cutscene.



Helen Daniels

BSc(Hons) Games Concept Design

The Design and Modelling of a Fantasy Character

The project looks at the ways in which fantasy characters are concepted, designed and modelled for games using workflows and techniques that are often used for creating character models.

Steven Daord

BSc(Hons) Computer Games Design

e: stevendaord@hotmail.co.uk

Comparative Analysis on Character Creation for Games

Through a written and practical exploration of character creation workflows this project aims to outline the workflows that are used within industry and to give the reason for them. By creating a 3D character model this project will give an example of the industry's best modelling practices.

Alexander Faulkner

BSc(Hons) Games Concept Design

e: a.faulkner1991@hotmail.co.uk

Character Creation Using an Industry Pipeline

Creating a character for a games engine.

Robert Hancock

BSc(Hons) Computer Games Design

e: www.robert_hancock@live.com
w: www.robhancock3d.com

An Investigation into Creating Characters for Video Games.

The aim of the project is to create a final game ready character that is worthy of a modern day title. The character will be created after researching the techniques used and the principles of professional artists and games studios.

Philip James

BSc(Hons) Computer Games Design

e: seals_beastie@hotmail.com
w: phil101.carbonmade.com

Soldier Character for Modern Story Based Military Game

3d character of Special Forces soldier David Archer. Developed to a game ready standard for display in a modern games engine.

Ben Leech

MEng(Hons) Computer Games Design

e: benleech2@gmail.com

Investigation of Team-Based Vehicles for Multiplayer Games

This project investigates vehicles that can be utilised, in a game environment, by multiple players; specifically in 3d first/third person shooter games. A live demonstration will show one of these vehicles in action on the Unreal Development Kit.

Andrew Longhurst

BSc(Hons) Computer Games Design

e: andy8787@hotmail.co.uk

Multiplayer Level Design and Environment Creation

The goal of the project was to create a compelling, immersive environment while still fulfilling the role of a functional, competitive multiplayer level. The project followed extensive research into all aspects of level design and art creation, managing to identify and utilize the best current industry workflows.

Christopher Man

BEng(Hons) Computer Games Design

e: mailto_christopher@hotmail.com

Implementing Production Techniques to Create Game Characters

The aim of this project is to investigate tools and techniques used to generate game characters. By utilising the methods based on the research, an industrial workflow will be generated to assist the creation of the game character, starting from the initial concept up to the final product.

Jagjit Matharu

BSc(Hons) Computer Games Design

e: gm1989@gmail.com
w: www.gmatharu.com

Investigation into Creating Fictional Weapons

Looking at existing fictional weapons from current first person shooters then creating my own weapon going from concept through to engine implementation for UDK (Unreal Development Kit).

Konstantinos Mousikidis

BSc(Hons) Digital Film and 3D Animation Technology

e: patobrien17@yahoo.gr
w: amazingcos.carbonmade.com

Horror Game Enemy Creation

Modern video game characters not only need to look visually pleasing but they also need to be handled efficiently by the Games Engine. Exploring both the creative and technical challenges of developing a resource efficient Non-Player Character to be rendered and tested in Unreal Engine 3.

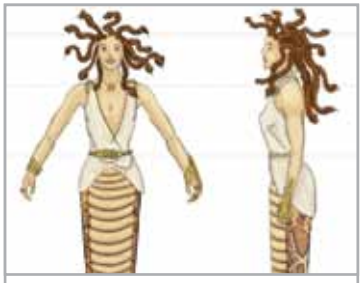
Daniel Osborne

BSc(Hons) Computer Games Design

e: daniel_o89@hotmail.co.uk

Investigation into Stylised Environments for a Games Engine

Studying stylised environments in games engines and the techniques used to create them.



Joel Packer

BSc(Hons) Computer Games Design

e: jpacker18@hotmail.co.uk

Developing a Gorgon for the Unreal Engine

This project focuses on creating a Gorgon for implementation into the Unreal Engine, covering research, design, production and presentation, achieving an appropriate result close to current generation game standards.

Benjamin Ranson

MEng(Hons) Computer Games Design

Use of Mocap in Game Cutscenes

An investigation into the benefits of using motion capture over traditional key frame animation in game cutscenes.

Matthew Southall

BEng(Hons) Computer Games Design

e: Mattyfantastic@virginmedia.com
w: http://matt-southall.tk

An in Depth Study into Modular Game Environments

The project looks into the creation of a modular game environment within a next generation games engine.

Kurt Stevenson-Bills

BSc(Hons) Computer Games Design

e: warlord_kurt@hotmail.co.uk

Creating Environments for Games in Engine

The production of a next generation game environment within UDK utilising methods and workflows used by industry professionals. This environment is built from scratch using high and low poly modelling, texture unwrapping, generation and engine lighting and effects to realise an original concept design.

Stephen Trimble

BEng(Hons) Computer Games Design

e: strimble18@hotmail.com
w: http://stephentrimble.carbonmade.com/

Using Animated Normal Maps to Enhance a Facial Rig

This project is designed to improve the visual realism of a game character in a real-time environment by researching and utilizing the use of animated normal maps with a facial rig.

Andrew Walton-Whitelock

BSc(Hons) Computer Games Design

e: asww141@hotmail.co.uk

Creating an Anthropomorphic Race Based on Ancient Cultures

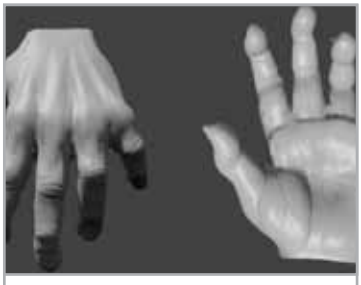
Look into various aspects of ancient civilisations and create an anthropomorphic race of both genders through designing to modelling and texturing. Other aspects such as fur will be looked into.

Charles Webber

BSc(Hons) Computer Games Design

An Investigation into Realistic and Captivating Environments

This project will investigate both the technological and design aspects from which a realistic yet Sci-Fi based environment can be created. This research will then be used to create a working, playable environment in which the player will find themselves heavily immersed.



Daniel Webster

BSc(Hons) Computer Games Design

e: retsbew-webster@hotmail.com
w: danielwebster3d.wordpress.com

Efficient Character Creation Using DX11 Technology

The subject of this project is the efficient creation of a next generation 3d computer game character model using industry standard workflows, with the use of DirectX 11 technology in the Unreal 3 engine.

Joe Woodruff

BSc(Hons) Computer Games Design

e: joeydub1988@googlemail.com
w: http://joewoodruff3d.weebly.com

Car Advertising Environment Design

Environment design within vehicle advertisement. Just how much computer generated imagery is used? Does the environment play a big part when it comes to selling a vehicle? Four stunning environments and two exquisite vehicles will be generated and tested to see just how important the environment is!

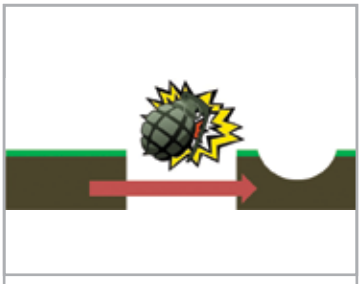
Daniel Baker

BSc(Hons) International Computer Games Programming

e: Baker.d.988@gmail.com
w: www.linkedin.com/pub/daniel-baker/20/229/3b7

Tackling the Problem of Sound Based Events in AI

Many senses are at work when a human interprets events. Sound plays a large role in this; events can be described by the sounds that are created by them. Using information in sounds, an Artificial Intelligence (AI) solution is proposed in which an AI can interpret these events and act accordingly.



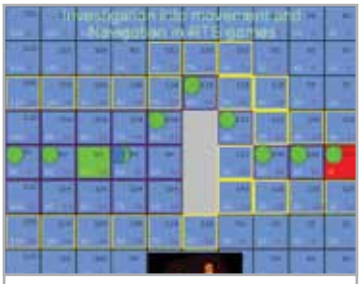
Adrian Banham

BSc(Hons) Computer Games Design and Programming

e: adrianbanham@live.co.uk

Real Time Terrain Deformation and its use in Modern Games

This project is looking at the dynamic use of ground deformation, supporting that it is a viable mechanic that should be used in more modern games.



Liam Beech

BSc(Hons) Computer Games Design and Programming

e: liambeech_1@hotmail.com

Investigation into Movement and Navigation in RTS Games

This project will be investigating how RTS units move around the game world and stay in formation when encountering obstacles and performing tasks.

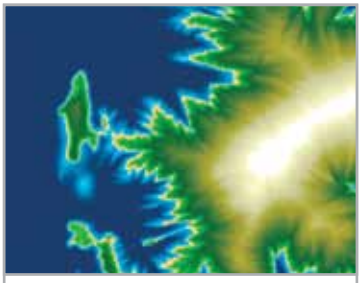
Kevin Bolam

BSc(Hons) Computer Games Programming

e: kevbolam1990@hotmail.com

Investigation into a Learning AI for a First Person Shooter

A learning Artificial Intelligence that learns the players tactics and adapts to them. This allows the difficulty of the game to be scaled based upon the players own individual abilities.



Timothy Brookes

BSc(Hons) Computer Games Programming

e: Timothy.Brookes@gmail.com

Development of a Modular AI Game Engine

An investigation into current and upcoming AI techniques for development of a comprehensive AI systems for use in gaming environments, a study of engine architectures to properly support AI implementation and provide fast development iterations. The investigation includes AI learning and use of traditional AI techniques.

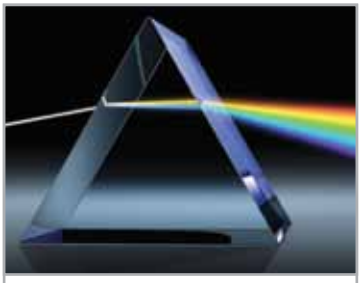
Daniel Chapman

BSc(Hons) Computer Games Programming

e: danieldavidchapman@gmail.com

Full-Body Gesture System for Kinect Games

To aid the development of Kinect games featuring many distinct input actions, a system was developed which could detect a variety of full-body gestures which allows developers to rapidly add or alter gestures.



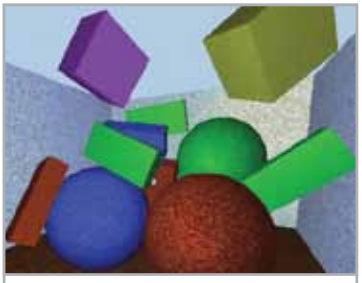
Andrew Coles

BEng(Hons) Computer Games Programming

e: andy@acoles.co.uk

Ray Tracing for Real-Time Applications

Investigation into the potential future uses of ray-tracing techiniques in rendering real-time applications such as games.



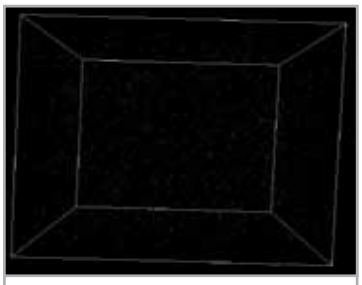
Andrew Cropley

BSc(Hons) Computer Games Programming

e: AndrewPCropley@gmail.com

Implementing Realistic Physics within a Game World

My project is about implementing realistic physics on specific objects within a game world and comparing it to a game world that has modified values of constants or even excluded elements such as gravity, friction or wind speed to simplify calculations and make it less computationally expensive.



Alex Davison

BEng(Hons) Computer Games Programming

e: alexdavison@hotmail.co.uk

Computer Game Particle System, Auto Resource Management

The optimisation of a computer game's particle system by automation of resource management according to game play within a 3D environment. Application development using Microsoft's XNA Framework 4.0 and Xbox 360.

Christopher Fitzpatrick

MEng(Hons) Computer Games Programming

e: chris.fitzpatrick@rythblade.com
w: www.rythblade.com

Simulating Pre-accidents for Safety Testing in BMW Vehicles

The development of a tool to simulate and render a configurable 3D environment in which a motor vehicle is driven, with a focus on road configurations and their surroundings in accident scenes, as part of a test harness for vision-based preventative safety sub-systems in next generation BMW vehicle safety systems.

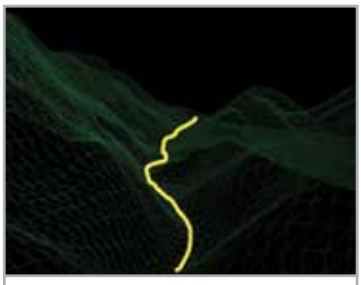
Thomas Foster

BSc(Hons) International Computer Games Programming

e: tom@thomasfoster.co.uk
w: ThomasFoster.co.uk

Latency: A Sniper's Lament

A project investigating how latency hiding techniques affect user's perceptions of the time delay, using a visual aid in the form of a simple accuracy based game.



Simon Harris

BSc(Hons) International Computer Games Programming

e: spuriousgeek@googlemail.com

Path Finding Techniques for Dynamic 3D Environments

Implementing useful path finding within dynamic 3D environments is a very common problem in the computer games industry. This project explains why path finding is a problem, discusses approaches to solving the problem and shows the design and implementation of a suitable solution.

Elliott Holt

BSc(Hons) Computer Games Programming

e: elliottholt1990@gmail.com

The Effects of Dynamic Environments on Path Finding

This project is about investigating the effects of dynamic environments on path finding within games. The aim is to find out the best path finding methods to use out of multiple different potential methods.

Sean Hunt

BSc(Hons) Game Artificial Intelligence

e: sean27039@gmail.com

Artificial Intelligence for Football Games

This project includes a research report on AI (Artificial Intelligence) techniques that could be used in a football game. Along with the report a demonstration of the chosen techniques is applied to a simple top down 2D simulation of a football game.

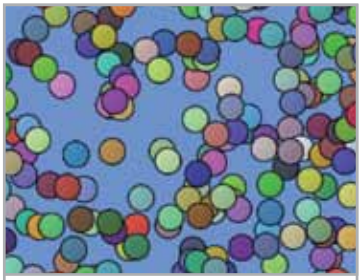
Hugh Laird

MEng(Hons) Computer Games Programming

e: laird.hugh@gmail.com

Applying Any-time Algorithms to Strategy Game AI

This project is about using Any-time algorithms in game planning, at a strategic level, to effect an adaptive and reactive strategy, with the aim of improving game-play without degrading performance.



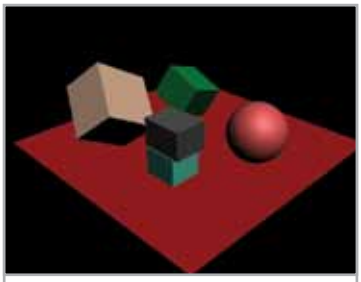
Nathaniel Lake

BSc(Hons) Computer Games Programming

e: nathaniel@lakemanor.eclipse.co.uk

Integrated Game Engine Script Parser

To show the integration of a scripting language and the added functionality this brings to applications' development.

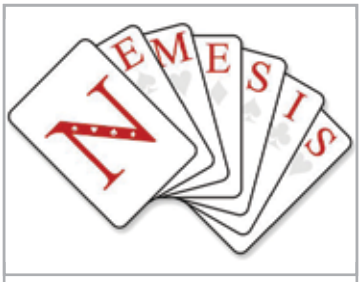


Simon Layton

BSc(Hons) Computer Games Programming

GPU Accelerated Physics

This project provides an insight into the rapidly emerging trend towards using a computer's Graphics Processing Unit to perform non-graphical tasks. In this case to assist the CPU in creating immersive physics simulation in a video game environment.



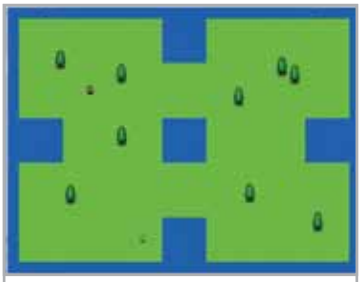
Anna Ljungberg

BSc(Hons) Game Artificial Intelligence

e: anna@aljungberg.com
w: www.aljungberg.com

Decision Making Agent for Computer Poker

A decision making artificial intelligence agent for computer poker, with the ability to make correct judgements, much like a professional poker player. By using techniques known by expert poker players, the agent evaluates the situation and minimises its losses on bad hands, and maximises its winnings on good hands.



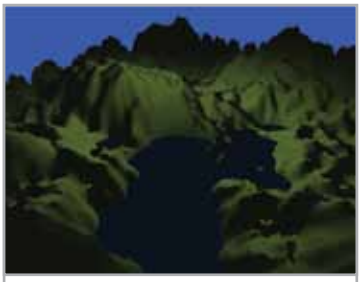
Ashley Mills

BSc(Hons) Computer Games Design and Programming

e: e2e51e7@live.co.uk

Realistic Anticipation in AI Engines for Games

This project will look at making artificial intelligence agents have more realistic anticipation behaviours in games. The project will discuss and utilise existing decision making architectures and movement algorithms to incorporate anticipation into existing AI systems just by making a few tweaks here and there.



Matthew Peter Mortimer

BSc(Hons) International Computer Games Programming

e: matt_mortimer@hotmail.com

Assessing and Altering Fairness of Game Terrain

Pseudo-Random terrain generation for strategy games that can assess and alter the fairness of the map it creates. Users can set the fairness of the map so that players of different skill levels can compete against each other.

STAFFORDSHIRE UNIVERSITY

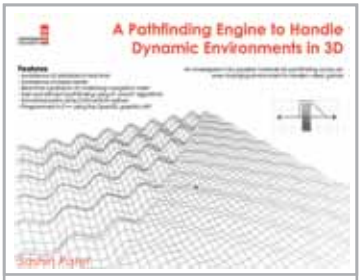
Edward Moss

BSc(Hons) Computer Games Programming

e: edward.moss@mac.com

Managing Randomly Generated Terrain

This project will be taking a look at the ways random terrain generation can be used in games. It will look at the different processes used to generate random terrain and the different styles that can be produced before looking at the various techniques used to handle the final generation efficiently.



Sashin Patel

BSc(Hons) Computer Games Programming

e: sashin.a.patel@gmail.com

A Pathfinding Engine to Handle Dynamic Environments in 3D

This project investigates the various methods which could be used in modern games to handle pathfinding in a dynamic environment. The implementation of the project demonstrates a specific method, with a focus on ensuring believability of an AI agent whilst not sacrificing performance.

```
Function CreateWorld () {
    GenerateMissionObjectives()
    GenerateLayout()
    GenerateObstructions()
    GenerateHostiles()
    PlaceCover()
    CopyOutMap()
    map.Clear()
}
```

Christopher Rawlings

BSc(Hons) Multiplayer Online Games Design

e: cf.rawlings@sky.com

Procedural Generation: Practical Applications

A demonstration of procedural generation applied to create unique game levels for a top-down third person shooter. This proof-of-concept demo is accompanied by research to support what constitutes effective use of procedural generation techniques in games design.

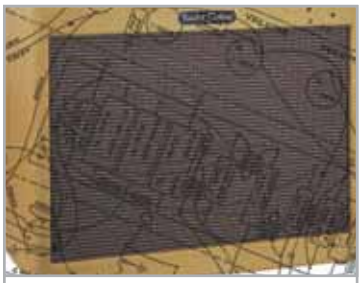
Matthew Arblaster

BSc(Hons) Music Technology

e: imadhaha@hotmail.com

Applications of Guitar Isolation Cabinets

The project investigated the use of guitar isolation cabinets as a means to lower noise levels on stages. A guitar isolation cabinet was designed in order to reduce the noise levels the stage crew are subjected to, prolong their careers and protect their hearing from damage such as Tinnitus.



Joshua Bellian

BSc(Hons) Music Technology

e: jdbellian@gmail.com

Design, Production and Analysis of a Vacuum Tube Amplifier

A vacuum tube amplifier is being developed and produced based on a old design from the 50s but using features found in modern amplifiers and made with modern parts. This will improve the amplifiers in many areas and will give the amplifier a niche in the modern market.

Harrison Boddy

BSc(Hons) Music Technology

e: harrison.boddy@hotmail.com

Establishing a Local Music Magazine

Using business and technological strategies a local music magazine will be set up, aiming to promote the local music scene.

Christopher Bowe

BSc(Hons) Music Technology

e: christopherpbowe@gmail.com
w: www.facebook.com/pillarsinthesky?sk=app_178091127385

Creating a Professional Mix Using Instrument Modelling

The project aims to present a piece of audio which has been recorded, mixed and mastered using very little equipment. The objective is to achieve a quality normally present in masters from high quality studios, whilst completing the task under budgetary constraints.

David Brown

BSc(Hons) Music Technology

e: davejbrown80@hotmail.co.uk

Weapon of Choice

An investigation into the technologies used to produce an electronic music track and the effect of various signal processing on the overall quality of the product, with a portfolio consisting of two tracks produced as a result of this research.

Andrew Bull

BSc(Hons) Music Technology with Management

e: leedsfan2001@hotmail.com

An Investigation into Disabled Artists within Music Industry

This project is showing how a disabled artist is promoted within the mainstream. It aims to show that just because a person has a disability, they can still become a recording artist. Marketing the singer in the mainstream allowed for people to judge the singer on talent instead of disability.

Neil Carr

BSc(Hons) Music Technology

e: zhunki@live.co.uk
w: soundcloud.com/zhunki

An Exploration of Hardtechno Production Techniques.

This project is an investigation into production techniques associated with hardtechno. The genre is broken down into its basic elements and each area documented. The end result is a step by step guide on how to produce a professional quality hardtechno track with a body of audio work demonstrating applied techniques.

Iain Dawson

BSc(Hons) Creative Music Technology

e: iain@musicfortheblind.co.uk
w: www.musicfortheblind.co.uk

Algorithmic Composition for Interactive Entertainment

Itmtf is an algorithmic composition system aiming to procedurally generate cinematic scores that react to events as and when they happen in a video game.

Nicholas Drayton

BSc(Hons) Creative Music Technology

e: ndrayton1@hotmail.co.uk

Small Room Acoustics

An analysis and investigation into noise control and acoustics in a multi-purpose recording environment in a secondary school, implementing applicable improvements, proposing appropriate acoustic designs and suggesting methods to tackle noise insulation issues.

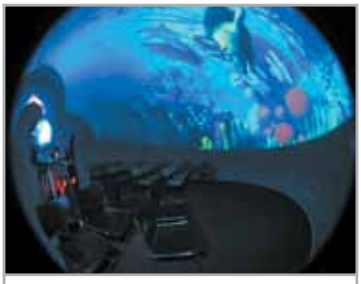
Samuel Galloway

BSc(Hons) Music Technology

e: s.galloway@live.co.uk

An Investigation into Recording Techniques Used in Studios

This project focused on the recording techniques and technology used within a studio environment to record popular music. A range of techniques and equipment available was researched and tested to establish methods.



Daniel Hodgkinson

BSc(Hons) Music Technology with Film Production

e: danielhodgkinson@hotmail.co.uk

An Investigation into Immersive Content for Digital Domes

'Fulldome' refers to an emerging medium for showing films and animation upon a 360° screen. The nature of producing basic dome content, exploring the advanced audio features not yet currently utilised by digital domes and exploring the dome's untapped potential for a wide range of applications.

Shadene Hutchinson

BSc(Hons) Music Technology

e: ShadeneHutchinson@hotmail.com

Technologies used to Produce, Mix and Master Hip Hop

An investigation into the technologies used to produce mix and master a hip hop track.

Alex Jockel

BSc(Hons) Music Technology

e: alexfhp@ntlworld.com

Acoustic Analysis and Recording Studio Design

Assess the suitability of an existing room for use as a recording studio. Investigate the acoustic properties of the room. Produce three recording studio designs.

Tom Karakas

BSc(Hons) Music Technology with Management

e: tomkarakas@gmail.com

Management and PR of an Unsigned Artist - Born Music Online

In the following report, the recommended guidelines for an unsigned artist to take from any stage of their career, whether they have just begun to get an interest in writing music or whether they have been writing and performing for a certain period of time, will be included.

Rahman Kebbie

BSc(Hons) Music Technology

e: r_kebbie@yahoo.co.uk

Exploring Sound Synthesis

The main outline for this project is to explore, research and investigate the use of sound synthesis by looking into two main types of synthesis that are common in electronic music. As the aim is to explore Subtractive and Granular and explain how they work in a certain way.

Matthew Lomax

BSc(Hons) Music Technology with Film Production

e: matthew_c_lomax@mac.com

Is Pro Tools a Suitable Work Environment for Post Production

The project looks at the process of creating a sound track for a film using Pro Tools. This has been done to assess its effectiveness in the post production world.

Michael Mangan

BSc(Hons) Music Technology with Film Production

e: michaelmangan@me.com

Creating a Film Soundtrack in 5.1 Surround Sound

This project is an investigation into the technical production of a film soundtrack in 5.1 surround sound. The overall theme of the project is audio post production specifically in the area of animation.

Joel Morrey

BSc(Hons) Music Technology

e: joelelliotmorrey@gmail.com

An Investigation into the Laptop as a Live Instrument

Hardware devices and software will be tested and analysed to see in what ways they take the laptop computer from being a piece of technology, into what may arguably be seen as an 'instrument' due to the visible interaction between performer and equipment.

Jonathan Prince

BSc(Hons) Mathematics and Music Technology

e: jimy_prince@hotmail.com

Research and Analysis of an Acoustic Environment

An analysis of the acoustics and PA system in the student union bar, with suggested improvements

Joseph Pryde

BSc(Hons) Music Technology with Management

e: prydemusic@googlemail.com
w: www.staffsmusic.com

Promotion of Bands, Events and Venues

An investigation into the promotion of bands, events and venues using many different promotion techniques. An event will be run to test the effectiveness of these promotion techniques as well as the running of the event it will also be streamed online.

Joel Rawlinson

BSc(Hons) Music Technology with Management

e: joel.rawlinson@gmail.com

Music Publishing and Studio Technology

An Investigation into music publishing and the technology used to create a commercially exploitable recording. This project aims to look at the publishing industry and how they sign song writers using contracts: also researching how song writers can record their music to a standard that will please publishers.

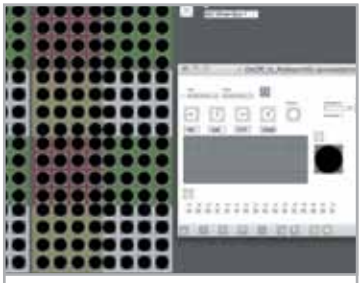
Graeme Reeves

BSc(Hons) Creative Music Technology

e: shadowseveer@hotmail.com

Interactive Music in Video Games

An investigation into the use of interactive music in video games, how it's used, why it's important and the effect is has on the gaming experience. Original interactive compositions will be created and manipulated via external controllers, simulating a gaming environment.



Christopher Southcott

BSc(Hons) Multimedia Computing With Film Production Technology

e: chris.southcott@gmail.com

Visual and Lighting Display Systems for Laptop Performers

Examing enhancing the performances of laptop-based musicians, via visual display and lighting systems. After analysing a multitude of budget options available, the result is a concept for a low-cost, dynamic, multicolour MIDI programmable lighting system.

David Stephenson

BSc(Hons) Creative Music Technology

e: davestephenson.tech@gmail.com
w: www.youtube.com/davestephensontech

Creating a Film Soundtrack
The audio side of film production, arguably half of the consumers' experience, is often taken for granted. It is a fine balance between technical knowledge and aesthetic choices. This project looks at the methods used to create a film soundtrack, with a focus on how specialist sounds are created in post production.

Lily Tomlinson

BSc(Hons) Music Technology

e: lilytomlinson@yahoo.co.uk

Investigation into Copyright and Commercial Music

This is an investigation into technologies used to produce a commercial piece of music and the copyright laws and contracts associated with the music industry. The project looks at how copyright law affects the creative process in producing new works of music and how effective copyright law is in the current market.

Alexander Watts

BSc(Hons) Creative Music Technology

e: alex22watts@hotmail.co.uk

Composition and Recording Techniques for Acoustic Guitar

This project joins the search for the perfect acoustic guitar sound, investigating the various contributing factors at different stages, from guitar design through composition, performance and recording. Creativity and technical knowledge have been applied to produce three pieces, utilizing a range of advanced methods.

Stuart Beale

BSc(Hons) Computer Networks and Security

e: stuart.beale1@googlemail.com

Investigation into the effect of VoIP on Wide Area Networks

The project is looking at the effects of implementing Voice Over IP telephony on an existing network, and what effect it has on other traffic types. To further this the project also looks into different methods that can be taken to reduce the effects of VoIP on Wide Area Networks.

Stuart Berham

BSc(Hons) Forensic Computing

e: contact@stuartberham.com
w: stuartberham.com

Forensic Acquisition Methodology for Smart Mobile Devices

The production of a methodological framework for the data acquisition workflow on various mobile device platforms, building upon the current procedures and guidelines established for forensic computing which lack substance and in-depth detail for mobile devices, especially the forensically sound extraction process.

Robert Catterick

BSc(Hons) Network Computing

e: rjc_555@hotmail.com

Researching QoS techniques within WAN Networks

My research looks at the different types of Quality of Service techniques and tests them through the different types of WAN network. I am testing throughout the WAN network because a LAN is a lot quicker and so QoS is very important in the WAN.

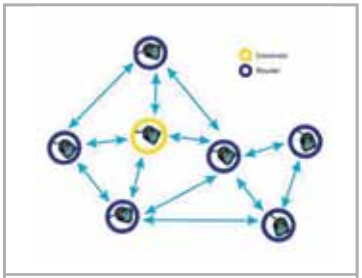
Christopher Eley

BSc(Hons) Computer Networks and Security

e: chriseley@gmail.com

Investigating the Impact Thin Clients have on a Network

This project will investigate the impact that thin client systems have on network performance in comparison to fat client systems within a corporate environment.



Mark Ferrin

BSc(Hons) Network Computing

e: markferrin@gmail.com

Investigation into Wireless Sensor Networks Using Zigbee

Zigbee, created by the Zigbee Alliance, is a wireless standard based on the IEEE 802.15.4 standard with added layers for network routing, security and other features. Using Zigbee I will implement a secure Wireless Sensor Network.

Gareth William Foot

BSc(Hons) Network Computing

e: garethfoot@gmail.com

A Desktop Notification and Usage Analysis System

To ensure a fast and visual method of communication of a short message across a campus, bundled with an analysis tool for Network Administrators. This project aims to efficiently deliver a message to selective users on a network and collect useful statistics from all PCs.

Paul Green

BSc(Hons) Forensic Computing

e: bealberna@gmail.com

Extracting Data from a Mobile Device

Data recovery in the iPhone market is growing with each version of the phone that is released, so a set of tools needs to become standard to extract the data. As well, what implications can occur if someone loses their iPhone and it falls into malicious hands?

Matthew Hamilton

BSc(Hons) Forensic Computing

e: mjh15@btinternet.com

Editing Offset Values within a Mobile Phone Whilst Avoiding Detection

Have you uploaded a picture from your phone to the internet? Know anybody who has? This gives away where you are, where you've been, where you might go again. Feel safe? Would you like someone to think you're somewhere you're not? My project will instantly show your pictures in a place they weren't initially taken.

Joseph Haslam

BSc(Hons) Computer Networks and Security

Exploring Cloud Based File Sharing in a Company Environment

Cloud computing has given users the ability to access their documents wherever they are using devices such as smartphone's, tablets and PC's. This project focuses on companies who want to apply cloud computing to their business and what effects it will have on the network, whilst also looking at the security risks.

Dean Hassall

BSC(Hons) Applied Information Technology

e: dean.hassall@ googlemail.com

Live Packet Analyser with a Knowledgebase for Students

Can a live packet analyser improve a student's understanding on how packets move round a network and the information the packet is carrying?

Jonathan Howells

BSc(Hons) Computer Networks and Security

Media Streaming over a Network with QoS and Compression

The project is about investigating the effects of streaming media via the latest end user devices on existing network infrastructures and what impact they are causing, if any. The objective of the research is to provide a range of solutions that are available to resolve this as effectively as possible.

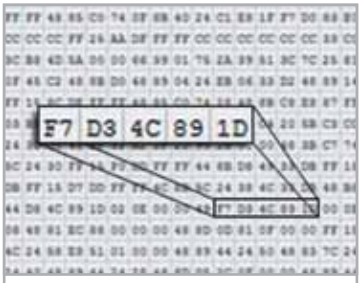
Christopher Johnson

BEng(Hons) Network Computing

e: cajohnson@live.co.uk

Effects IPv4/IPv6 Transition Techniques on Multicast Comms

This project explores the impact of different transition techniques for IPv6 and v6 upon multicast communications.



Caleb Kershaw

BSc(Hons) Forensic Computing

e: caleb517@hotmail.com

How Criminals Utilise Slack Space to Hide Digital Evidence

An investigation into the different methods of storing data into slack space, how this knowledge is being utilised by criminals and how this data can be accessed and retrieved by digital forensic investigators on NTFS based systems.

Joanne Longman

BSc(Hons) Forensic Computing

e: jo.longman@yahoo.com

Authentication Breach Investigation Methodology

Biometric devices are becoming more common as political and social issues have caused an increased need for better security and more accurate ways of identifying individuals. Biometric devices are perceived as being infallible, but what happens when there is breach of authentication? How would it be investigated?

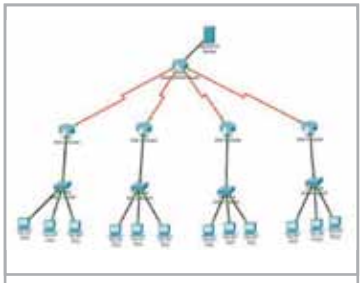
Thomas McElroy

BSc(Hons) Forensic Computing

e: sirn1xy@gmail.com

AppRecon - Android App Forensics

A project exploring the emerging field of smart phone forensics aiming to re-define how forensic investigators analyse smart devices. With a focus on Android, the project provides an acquisition methodology and forensic tool to extract and present application and usage data from the device to the examiner.



David Moss

BSc(Hons) Computer Networks and Security

e: david_moss@me.com

An Investigation into Media Streaming over Computer Networks

This project aims to, based on three different network topologies this project aims to investigate the effects of media streaming on typical corporate network infrastructures and advise as to how best to configure these topologies for this use.

Josef Olkiewicz

BSc(Hons) Forensic Computing

A Forensic Investigation into the Filesystem Behind iOS5

This project centres on the development of a prototype tool that can extract data from an iPhone running iOS5. This allows the user to browse the filesystem of the device and view certain forensically relevant files.

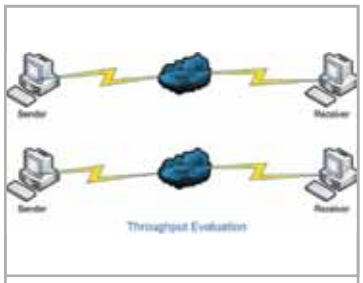
Carl Pearce

BSc(Hons) Forensic Computing

e: ccarlpearce@gmail.com

Investigating the Analysis of Rooted Android Mobile Devices

This report is an investigation into the methods of Spoofing the existing forensic tools and techniques, when investigating an Android mobile Device.

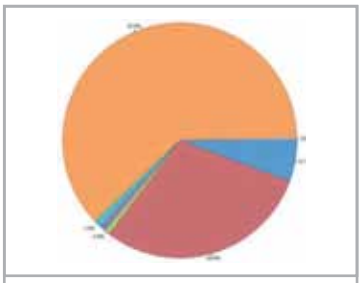


Mark Percox

BSc(Hons) Computer Networks and Security

e: mark_percox@hotmail.co.uk

Critically Analyse Layer 3 Network Speeds over the LAN/WAN
This dissertation aims to distinctly research the differences between the layer 3 protocols of IPv4 and IPv6, analysing the differences between them, and justifying the LAN and WAN topologies. Testing of the protocol capabilities and a conclusive evaluation of the protocol speed overhead variations will be discussed.



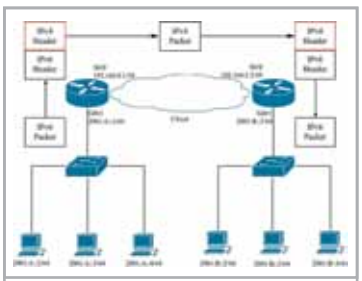
Matthew Richards

BSc(Hons) Computing Science

e: matt_of_empire@hotmail.com

A Network Analyser

Network analysers are vital for checking the performance of networks. This project is to create an easy to use network analyser that incorporates powerful features with an easy to use interface.



Curtis Staple

BSc(Hons) Computer Networks and Security

e: curtis_1254@hotmail.com
w: www.linkedin.com/pub/curtis-staple/38/865/809

Investigating the Migration from IPv4 to IPv6
Research and investigations that look into what benefits introducing IPv6 could bring to a medium sized organisation, compared to the existing IPv4. Looking at how the transition to IPv6 could be done, with a number of tests to see what each technique produces with regards to network performance characteristics.

Katharina Bier

BSc(Hons) Computing Science

e: katharina.bier@gmx.net

eCookBook with Cupboard Management

My project is an online cookbook with functionalities like create an report about personal nourishment or search for recipes which would be possible with the ingredients in my cupboard.

Carl Brooks

BSc(Hons) Applied Computing

e: bruuksy@gmail.com

Tracking Users Mouse Movements and Clicks on a Website

Collecting user activity on a webpage by gathering the coordinates of the mouse movements and mouse clicks in order to then be able to visual display a user's journey on a webpage by plotting transparent circles for mouse clicks and squares for the mouse path.

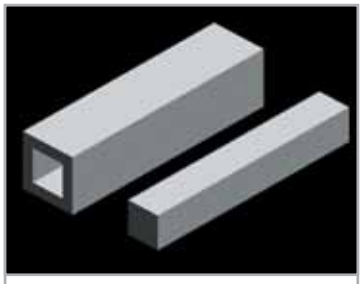
Matt Burgoyne

BSc(Hons) Web Development

e: matt_burgoyne@hotmail.com

Managed Interactive Golf Course Mobile Application

A system to assist with golf course management by providing golf staff real-time data to boost their understanding of what happens out on the golf course. While, at the same time giving golfers a rich interactive application to boost their experience on the course.



Jamie Candlin

BSc(Hons) Multimedia Computing

e: jamiecandlin@gmail.com
w: www.jamiecandlin.webs.com

Modular Object Rendering Solution for Industry Design

A system which integrates modifiable 3D models and industry standard toolsets to enable the effective and efficient design of modular engineering components.

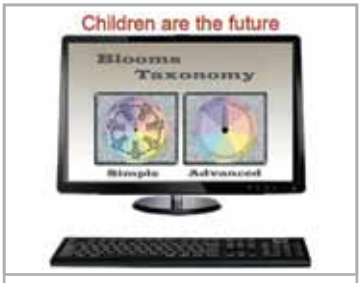
Matt Collins

BSc(Hons) Web Development

e: mattcollins171@gmail.com

Real Time Location Based Game Management System

The project is all about the idea of mixing the old idea of orienteering/geo-caching and mixing it with new mobile and web technologies, in a way in which users can create and build their own 'Runs'



Stuart Harding

BSc(Hons) Web Design

e: swhdesigns2010@gmail.com

The Effectiveness of an Online Learning Aid for Children

The learning aid will consist of a spinning wheel that will stop randomly and produce questions for the user to answer following Bloom's taxonomy. There will be a way to set how difficult the questions will be. This project will be generic and adaptable for any lesson of any age group with any academic ability.

Matthew Haynes

BSc(Hons) Web Development

e: matthaynes17@aol.com

Badminton Score Centre

An android application that displays badminton scores, videos, photographs, news and leagues so that clubs can monitor the progress of other clubs. A full referenced report which shows different methodologies that were investigated and the design of the application.

Charlotte Horton

BSc(Hons) Multimedia Computing

e: gradex12cmh@hotmail.co.uk

A Supportive Multimedia Application for Education
A web based interactive multimedia application for students with a reading age of 12-14 who have special educational needs. The application provides support to students who have difficulties with speech and language and also provides a resource to teachers to use inside and outside a classroom based environment.

Russell Hunt

BSc(Hons) Web Development

e: russell@apphaus.co.uk
w: www.apphaus.co.uk

Controlling a Nearby Display with a Mobile Device

Take control of information on a large display using your smartphone or tablet and control it in real time. Built using HTML5, Javascript, CSS3, WebGL, Node.js, WebSockets and SPDY. Implemented as a car showroom demo - come personalise your car and take it for a spin using your phone.

Christian Hutchison

BSc(Hons) Web Development

First Aid Help

The project is about a system which will help people in the first aid sector whether they are first aid trainers, first aiders or potential first aiders. The system will utilize two distinctive sections which are a quick search and an introduction to first aid.

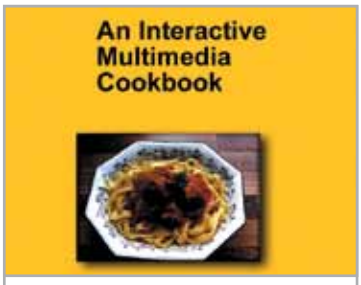
Mark Jones

BSc(Hons) Web Development

e: markwaynejones123abc@yahoo.com
w: mwjdesigns.com

Mobile Web Orienteering Card Collecting Game Application

Creating an orienteering mobile web application. Rather than use physical trading cards compasses and paper maps I will use mobile device GPS for users to find checkpoints where the cards are hidden and the trading card themselves will be virtual. A web game will also be made for users to battle cards.



Samuel Moreno

BSc(Hons) Multimedia Computing

e: samus-89@hotmail.com

An Interactive Multimedia Cookbook

To develop and build an interactive multimedia application aimed at teaching adults how to cook a variety of different meals using cheap, healthy and simple recipes based on the Mediterranean diet. The application will incorporate the use of video, sound, animation and text.

Philip Ricardo

BSc(Hons) Computing Science: Web Development

e: philipricardo@gmail.com
w: www.philipjricardo.com

A HTML5 Video Game for Web Browsers and Mobile Devices

Developing applications for cross platform and cross device can require a huge repertoire of skills. This project reveals an investigation into developing a game for web browsers and multiple mobile devices solely using web technologies.

Matthew Russell

BSc(Hons) Web Development

e: matthew.russell@hotmail.co.uk

Online Project and File Management Application

Creative Cloud's project management functionality along with its multiple interaction features makes it the ultimate solution for overcoming communication difficulties that are faced by students working on group tasks. Creative Cloud makes completing projects in a team simple and ultimately reduces downtime.

Edward Smith

BSc(Hons) Web Programming

e: edward@ezmi.co.uk
w: www.ezmi.co.uk

A Web Based Application for Web Site Development.

This project aims to create a web based code editing application that is available from any computer with internet access. Creating this web based code editor is beneficial as it adds additional functionality a traditional code editor can not provide.

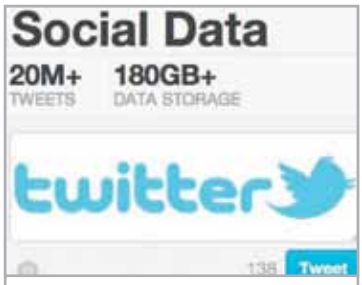
Thomas Spillar

BSc(Hons) Web Programming

e: tom.spillar@gmail.com
w: www.tomspillar.net

Web-based Project Management System

There are many project management tools available, typically complicated and expensive. Having a web-based project management system allows for use worldwide with just a browser and internet connection. Focusing on simplicity allows for greater uptake and participation from more stakeholders.



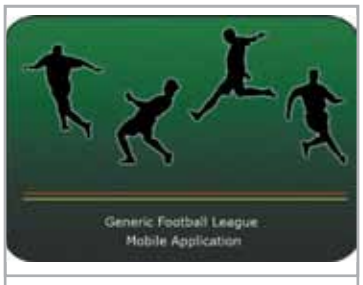
James Robert Stanley

BSc(Hons) Web Development

e: jamesr.stanley@gmail.com
w: www.jrstanley.co.uk

Analysis and Applications of Real-time Social Data

An investigation into the innovative applications and business value of open social data aggregation and analysis, using a continuous data source of user generated content, from the social networking platform Twitter.



Andrew Taylor

BSc(Hons) Web Development

e: tylrandy@gmail.com
w: www.tmdweb.co.uk

Generic Football League Mobile Application

A mobile web application created for the managers, players and supporters of Football Clubs in the lower part of the FA's league structure. The application has been designed to bring together individual team and player information into one central source whilst using the latest mobile web technologies.

Lewis Jones

BSc(Hons) Broadcasting Technology

Design and Development of a Digital Media and Broadcast Centre

As an employee of Aston Villa Football Club I am responsible for building the new Digital Media and Broadcast Centre. The project identifies the requirements of a modern day television studio, design of a technical solution and the management of a project implementation and commissioning plan.

Jack Close

BSc(Hons) Film Production Technology

An Investigation into Stop Motion

To research and create a short stop motion film.

Matthew Rushton

BSc(Hons) Film Production Technology

Channon Wallace: Front Blunt

A short film documenting the events of a photo shoot for Sidewalk magazine in May 2008. The events of that day are told by the three people present, 4 years on.

Mark Wright, Leanne Jones, David Jenkins

BSc(Hons) Film Production Technologyy

Eurydice: The Short Film

A Collaborative Investigation into the Perception of Colour Effects, Editing and Direction, Sound Design in Fantastical Environments, and Marketing and Distribution for Independent Film.

Faculty of
Computing, Engineering and Technology

STAFFORDSHIRE UNIVERSITY

Contacts

Gradex
t: +44 (0)1785 353430
e: gradex@staffs.ac.uk

Student Recruitment and Admissions
t: +44 (0)1782 294400
e: enquiries@staffs.ac.uk
f: 01782 292740
www.staffs.ac.uk/fcet

Research
t: 01785 353469
e: fcetresearch@staffs.ac.uk
f: 01785 353497
www.staffs.ac.uk/fcet/research

Business Innovation Support Team
t: 01785 353469 / 353490
e: enterprise@staffs.ac.uk
f: 01785 35353560

Cisco Academy for Cisco certification
t: 01785 353377
e: ciscoacademy@staffs.ac.uk

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