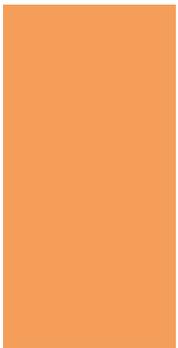
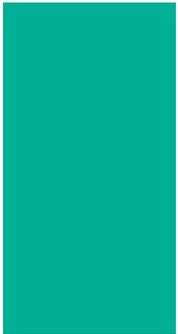
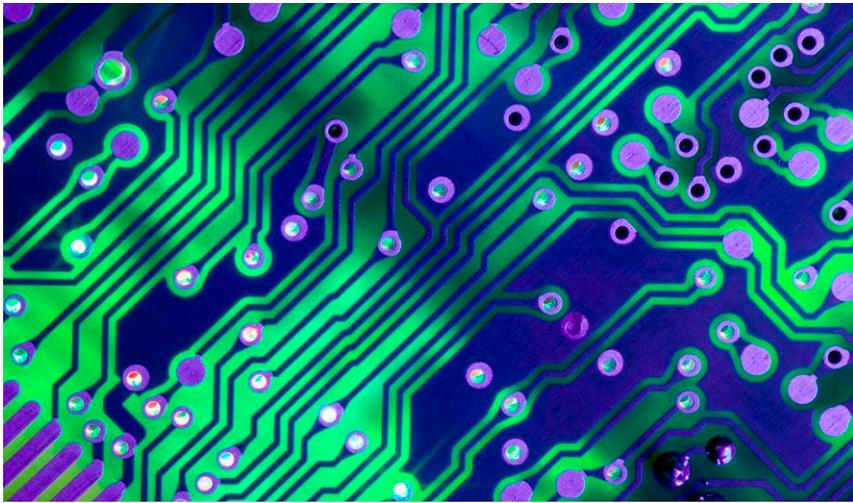


# COMPUTER SCIENCE IN SCHOOLS CONFERENCE 2015

Workshops



## EVENT SPONSORS



North Staffordshire Branch



# Please select 4 workshops from the list below.

## Workshop session 1

### Controlled assessment – an exam board's perspective

Robert Leeman - OCR Computer Science/ICT Subject Specialist

### Projects for Pi +£20.00

Jonathan Westlake – School of Computing at Staffordshire University

The Raspberry Pi comes in a box and sits on the shelf gathering dust – not in this session. Projects using the Raspberry Pi and a limited budget, this session will show what can be done with a focus on cross curricula use. Examples will include Jonathan's Hedgehog Project!

### Digital forensics and cyber security

Rob Shaw – Staffordshire University

Looking into the processes of extracting data forensically from devices without compromising the integrity of the data. This session will explore the standard industry approach as well as some free tools available to work with.

### Using TouchDevelop

Rachael Trubshaw – Network of Excellence/Staffordshire University

This session will introduce the mobile app creator TouchDevelop. Developed by the Research in Software Engineering group at Microsoft Research, this session will show how to create a game and highlight its potential for introducing programming concepts in a simple and fun way.

### The Web is Computer Science too!

Fiona Knight – Staffordshire University

What web development is - so much more than the design view in Dreamweaver – including getting creative with Canvas.

## Workshop session 2

### Games development: education to industry

Dr Cathy French – Academic Group Leader, Software Engineering, Computer Games and Mobile Systems

This session will give you an overview of the educational tools available to get young people making their own games to spark their interest in programming, before exploring the different roles and skills the games industry is looking for. It will also aim to get you thinking about the journey young students will need to go on to succeed, and the importance of students laying their learning foundations before university.

### App Inventor

Nic Shulver – Staffordshire University

An introduction to Android apps using App Inventor 2. You will develop a simple app and see it running on a tablet or Smartphone. No previous experience of apps necessary

### Experiences of teaching programming and control systems using Raspberry Pi and Python

Paul Simmons – Newcastle-under-Lyme College

Reflections on teaching programming using Raspberry Pi and discussion of issues and ways forward, including Q&A/troubleshooting section to allow delegates to discuss their issues from this year and help with solutions.

### Access to Sequel

Peter Radford - Sir Stanley Matthews Academy

Making the transition from Access in ICT to Sequel in Computer Science.

### Planning a Key Stage 3 curriculum to support controlled assessment at Key Stage 4

Paul Maddock – School of Education at Staffordshire University

Are you happy with your Key Stage 3 curriculum? The Staffordshire University PGCE Computer Science group have been comparing practice across 18 schools and looking at the impact of foundation work in Key Stage 3 on the controlled assessment tasks in Key Stage 4.

## Workshop session 3

### BBC BASIC – Introduction to programming for the 21st century classroom

Tom Williamson - North Staffs RJam Group

If you're new to computer programming or want to move on from other platforms such as Scratch, then Acorn/BBC BASIC is for you. In this workshop session you'll be shown some simple tutorials that take from 10-20 minutes each to complete and give maximum visual on-screen results for minimum coding time. Ideal for short classroom sessions!

### Networking and cyber security

Dr Justin Champion & Chris Howard – Staffordshire University

An insight into some practical ways to consider networking technologies, with a focus on cyber security.

### KS3-4 Robotics challenge featuring LEGO® MINDSTORMS EV3

David Gregory - Lego Education

Build and Program your MINDSTORMS EV3 robot to navigate through a landscape of obstacles to reach your final destination. This 1 hour session will give all participants a great overview of how to deliver the computing curriculum with a hands on approach.

### Networking and cyber security

Dr Justin Champion & Chris Howard – Staffordshire University

An insight into some practical ways to consider networking technologies, with a focus on cyber security.

### An open source classroom

Russell Thornewill – Ivanhoe College

How to please your School Bursar - Russell will share his experience on running his classroom on open source software.

## Workshop session 4

### Projects for Pi +£20.00

Jonathan Westlake – School of Computing at Staffordshire University

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### Tips on Scratch and Python

Nic Shulver – Staffordshire University

Want some programming advice on how to get the best out of Scratch or Python? Nic will be available to take your questions so bring your problems along. This session is an open ended advice session but will also allow Nic to share his experience of Scratch and Python from a programmer's perspective.

### How well prepared are you to deliver Computer Science? – A skills audit

Paul Maddock – Staffordshire University

Conducting a self-audit to identify future CPD needs and opportunities

### Digital forensics and cyber security

Rob Shaw – Staffordshire University

Looking into the processes of extracting data forensically from devices without compromising the integrity of the data. This session will explore the standard industry approach as well as some free tools available to work with.