Computing conference

with CAS Regional Centre for Yorkshire and Humber

30 June 2017

Learn, share, gain

Learn about different areas of teaching, assessment and professional development.
Share best practice with a network of your peers.
Gain ideas and resources to take back to you classroom.

Sessions for primary	Summary	Presenter
Keynote	Diversity in the technology industry and how to balance it out.	Gillian Arnold
Great activities for unplugged lessons	A session featuring CAS Barefoot and CS4FN card tricks.	Martin Coleman
Safeguarding through the computing curriculum	Online safeguarding is a whole-school priority. Find out how to integrate this important theme through the primary computing curriculum.	Sue Finnigan
Getting started with code club	Code Clubs are a great way to improve skills and knowledge through engaging extra-curricular activity. Discover how to find volunteers and get your club up and running.	Rik Cross
Coding in key stage 2 through the use of apps	A practical session that introduces computational thinking. We start with unplugged vs plugged sessions and discuss the value of each. We then explore a progression of apps that can be used from lower stage key stage 2 (years 3-4) to upper key stage 2 (year 5-6).	Scott McHale

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Sessions for primary	Summary	Presenter
Coding and going beyond: introduction to VEX IQ	Explore the use of VEX IQ robotics in the key stage 2 curriculum. The practical elements of this workshop focus on transferring and adding to pupils' coding skills, it will however also highlight cross-curricular opportunities (from STEM to literacy and SEN). No previous coding knowledge is required to attend this workshop. All kit and software will be provided.	Niels Puttermans
Stretching Scratch	Scratch is hugely popular, but how can you take it to the next level? This session includes practical ideas for increasing challenge and improving computational thinking through more advanced Scratch features.	Rik Cross
Cubetto in the early years (ages 4-6)	The power of computational thinking in early years learning classrooms - a simplified cross-curricular approach to introducing big ideas (and decomposing them to manageable chunks.	Mark Overland
Meet the Master Teachers	Master Teachers are near to you and here to help! Meet the local CAS team and make important links with knowledgeable and approachable teachers able to share ideas and guidance.	Paul Willcox

Sessions for secondary	Summary	Presenter
Keynote	Diversity in the technology industry and how to balance it out.	Gillian Arnold
Speech and animation with Python on a micro:bit	Explore fun, free resources that let you create images, animation, music and speech with and without a micro:bit. No prior Python or micro:bit experience required, you'll try out the activities as well as discuss how to plan for the cost, preparation and maintenance of using micro:bits.	Pete Dring
Transitioning to text at key stage 3	Moving students from visual languages such as Scratch can be a challenging transition. Make it easier, and more fun, in this session	Rik Cross

Sessions for secondary	Summary	Presenter
Introduction to functional programming	Functional programming requires a different way to think about programming for A level computer science. This session will point you in the right direction.	Christine Harvey
Cyber security practical activities	A range of practical activities to try breaking into test systems or observe network traffic alongside paper activities to do different types of encryption or key exchange.	Stephen Rice
GUIZero - GUIs made easy	Learn how to create Python GUI applications simply and quickly with GUIZero. GUIZero aims to take the frustration out of creating graphical interfaces for students. The package requires minimal installation and no configuration, so it is straightforward to get up and running on a school network.	Laura Sach
Introduction to Tenderfoot	A practical taste of the new CAS Tenderfoot training materials, designed to develop a new generation of curriculum leaders and computing teachers from key stage 3 up.	Roger Davies
Simulating our world (Tenderfoot)	Adventures in agent based modelling. Many natural phenomena can be explained in terms of emergence – group behaviour that arises from the interaction of many 'agents' following very simple rules. Think, for example of eco-systems, epidemics or patterns of erosion. This session introduces the CAS Tenderfoot materials to introduce simple models at KS3 up, using a 'block based' language.	Roger Davies
SQL crash course	SQL is a powerful query language for databases, and features at GCSE and A level. This session will get you up and running.	Stephen Rice
Networking with Raspberry Pi	Practical activities using low-cost network components, covering aspects of GCSE and A level networking requirements.	Alex Jones

Sessions about inclusion	Summary	Presenter
CodeBug for students with EAL	In certain areas of the country there are transient populations where English is is an additional language. These students often feel isolated and experience difficulties engaging with the curriculum. Using software tools, this session demonstrates how these students may feel, so that teachers can experience first hand dealing with lessons in a new language. The session will also demonstrate using tools and features of CodeBug, and how to integrate learning for students whom English is an additional language.	Dawn Hewitson
Unplugged activities to support communication and literacy	Explore the use of LEGO and constructionism to deliver communication activities through computing. Constructionism starts with the belief that children learn best when they experience things first-hand within a meaningful context.	Tom Radge
Who is taking computing and what the data shows	While computing is a compulsory aspect of the English National Curriculum, this session looks at next steps. Are students choosing further study of computing? If so, which children, and what can be done to make sure everyone is included?	Peter Kemp
Computing for all? Top tips for an inclusive curriculum	Making our schemes of work accessible to all is a huge challenge. This workshop explores six practical ways we can create opportunities for any student to thrive within a vibrantly inclusive computing curriculum and looks at the knock-on impact on the recruitment, retention and academic success of our students.	Pete Dring

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