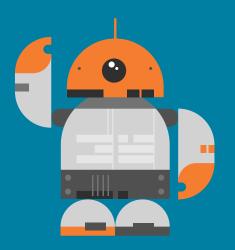
# FESTIVAL OF COMPUTING 14 – 17 March 2022



Welcome to our Festival of Computing, an online event where we aim to celebrate the world of computing and enthuse students by educating teachers about different STEM careers and how to teach computing.

14 March – A level and beyond

15 March – Primary computing

16 March - Shifting the gender gap in computing

17 March – Secondary computing

Use the links above to book







### 14 March – A level and beyond

### Join the sessions <u>here</u>

| <b>Session Time</b> | Session Title                  | Presenter                       |
|---------------------|--------------------------------|---------------------------------|
| 15:30 – 16:00       | Do you know enough about Cyber | Dr Robert Nowill Cyber Security |
|                     | Security?                      | Challenge UK                    |
| 17:30 – 18:00       | Isaac A level taster session   | Diane Dowling                   |

### 15 March – Primary computing

### Join the sessions <u>here</u>

| Session Time  | Session Title                      | Presenter                       |
|---------------|------------------------------------|---------------------------------|
| 08:00 – 08:30 | Reviewing Online Safety linked to  | Christian Turton, Primary Lead, |
|               | changes in KCSIE                   | Sandringham Computing Hub       |
| 12:00 – 12:30 | An introduction to CAS and         | Tim Wilson (CAS Outreach        |
|               | Barefoot Computing                 | Manager)                        |
| 12:30 – 13:00 | Rosenshine's Principles in the     | Christian Turton, Primary Lead, |
|               | Primary Computing Classroom        | Sandringham Computing Hub       |
| 15:30 – 16:00 | Inspirational ideas for primary    | Tim Wilson (CAS Outreach        |
|               | computing leads                    | Manager)                        |
| 16:00 – 16:30 | Crumble, simple demonstration of   | Stacey Jenkins                  |
|               | potential projects as a taster for | Computing Hub Lead              |
|               | loaning equipment and CPD          | London & Home Counties Hub      |
| 16:30 – 17:00 | STEM Ambassadors - An              | Fatma Emin, STEM Ambassador     |
|               | introduction to the programme      | Hub and STEM Ambassador         |
| 17:00 – 17:30 | Unplugged and free online ideas    | Stacey Jenkins                  |
|               | to teach computer science with a   | Computing Hub Lead              |
|               | cross curricular theme             | London & Home Counties Hub      |
| 17:30 – 18:00 | New EYFS resources & Workshop      | Isabella Lieghio                |
|               | from Barefoot                      |                                 |

### 16 March – Shifting the gender gap in computing

### Join the sessions <u>here</u>

| Session Time  | Session Title  | Presenter  |
|---------------|--|--|
| 09:00 – 10:00 | Females and IT careers in the automotive industry  | Katy Senior, Ford  |
| 10:00 – 11:00 | Tech we Can  | Becky Patel, Head of Early Education, Tech She Can Charity |
| 11:00 – 12:00 | "IT is not for Girls"  | Jessica Zeun, Ethical Social Group                         |
| 13:00 – 14:00 | Psychology: a cloak of invisibility for computing  | Andy Field, University of Sussex                           |
| 14:00 – 14:30 | The Importance of Making 'Connections'   | Su Adams, U Can Too  |
| 14:30 – 15:00 | STEM Ambassadors - Introduction to the programme   | Fatma Emin, STEM Ambassador<br>Hub and STEM Ambassador     |
| 15:00 – 16:00 | #IAmRemarkable - a Google workshop that empowers women and underrepresented groups to celebrate their achievements in the workplace and beyond | Leslie Whyte-Venables, Regional Lead, STEM Learning        |

### 17 March – Secondary computing

### Join the sessions <u>here</u>

| Session Time  | Session Title                         | Presenter                   |
|---------------|---------------------------------------|-----------------------------|
| 12:00 – 12:30 | What is Computing at School?          | Tim Wilson (CAS Outreach    |
|               |                                       | Manager)                    |
| 12:30 – 13:00 | Diagnostic Assessment for GCSE        | Dan Smith, Computing Hub    |
|               | Computer Science                      |                             |
| 15:30 – 16:00 | Inspirational ideas for secondary     | Tim Wilson (CAS Outreach    |
|               | computing leads                       | Manager) & CAS community    |
|               |                                       | leaders/members (TBC)       |
| 16:00 – 16:30 | Pedagogy for teaching CS              | Stacey Jenkins              |
|               | programming                           | Computing Hub Lead          |
|               |                                       | London & Home Counties Hub  |
| 16:30 – 17:00 | Micro:bits, simple demonstration      | Stacey Jenkins              |
|               | of potential projects as a taster for | Computing Hub Lead          |
|               | loaning equipment and CPD             | London & Home Counties Hub  |
| 17:00 – 17:30 | Are you Ofsted ready?                 | Carmine De Grandis          |
| 17:30 – 18:00 | STEM Ambassadors - An                 | Fatma Emin, STEM Ambassador |
|               | introduction to the programme         | Hub and STEM Ambassador     |

### FESTIVAL OF COMPUTING – speaker information

<u>Do you know enough about Cyber Security?</u> with Dr Robert Nowill - Chairman, Cyber Security Challenge UK

Bob is Executive Chair of The Board at The Cyber Security Challenge UK Ltd, an independent security Consultant Director and Advisor, and a Trustee at The Cyber Trust. His career has also included periods with UK MoD, GCHQ, BT, in The Netherlands with The SHAPE Technical Centre, research at Cambridge University Engineering Department, and as a non-Exec Director with IRM Ltd. In December 2021 Bob won a Lifetime Achievement Award at the 2021 inaugural Cyber Outstanding Security Performance Award (OSPA) ceremony.

"In my session I will talk about the cyber profession, opportunities, and technology generally, alongside internet safety, with some information on careers and routes into this world of cyber aimed at inspiring questions and further interest. I will demonstrate online a couple of our popular activities and an App we have developed in concert with The Cyber Trust."

https://www.linkedin.com/in/drbob625/?originalSubdomain=uk @DrBob625 @cyberchallenge https://cybersecuritychallenge.org.uk/

#### Isaac A level taster session with Diane Dowling

In this online CPD session for teachers, you will learn about the features available on the Isaac Computer Science platform. Dianne works at the Raspberry Pi Foundation in conjunction with the NCCE. She will demonstrate the main features of Isaac, as well giving you the opportunity to try them out.



https://www.linkedin.com/in/diane-dowling-a9759094/

https://isaaccomputerscience.org/

## <u>Breakfast Briefing: Reviewing Online Safety linked to changes in KCSIE</u> with Christian Turton, Primary Lead, Sandringham Computing Hub

Technology, risks and harms related to online safety evolve and change rapidly. This session aims to talk through some of the recent updates to the Keeping Children Safe in Education guidance, due for implementation from 1<sup>st</sup> September 2021.

https://www.linkedin.com/in/christian-turton-7a3a0829/?originalSubdomain=uk @ComputingHubSAC



## An introduction to CAS and Barefoot Computing with Tim Wilson (CAS Outreach Manager)

Computing at School (CAS) is the leading community for computing teachers in the UK. Find out more about how joining Computing at School can benefit you, your career and your teaching as well as your school and young people.

### www.computingatschool.org.uk

Developed by teachers and backed by research, Barefoot Computing helps boosts primary teachers' subject knowledge, saves them time and brings computing to life in the classroom. Find out more about how Barefoot delivers digital dreams to the classroom.

https://www.barefootcomputing.org/

https://www.linkedin.com/in/mrtimwilson/?originalSubdomain=uk

@CASMidlands, @CompAtSch

### Rosenshine's Principles in the Primary Computing Classroom with Christian Turton

Rosenshine published the Principles of Instruction: a set of 10 research-based principles of instruction, along with suggestions for classroom practice. The principles come from three sources: (a) research in cognitive science, (b) research on master teachers, and (c) research on cognitive supports. In this session we will explore how these principles can be used in the classroom.

https://www.linkedin.com/in/christian-turton-7a3a0829/?originalSubdomain=uk

@ComputingHubSAC

### Inspirational ideas for primary computing leads with Tim Wilson

Training and enrichment to help you teach and lead the computing curriculum and improve learning across your school. In this session we will look at some activities that embed coding and computing with aspirational activities and lessons.

https://www.linkedin.com/in/mrtimwilson/?originalSubdomain=uk

@CASMidlands, @CompAtSch

## <u>Crumble, simple demonstration of potential projects as a taster for loaning equipment and CPD</u> with Stacey Jenkins, Computing Lead, London & Home Counties Hub

The Crumble Controller is an easy-to-use programmable device, ideal for physical computing in primary schools. Capable of driving two motors and 4 terminals, children can connect LEDs, switches and other interesting add-ons. During this session you will get an overview of some of the exciting activities you can plan using our loan equipment.

@CompHubLGS

## STEM Ambassadors - An introduction to the programme with Fatma Emin (London STEM Ambassador Hub) and a STEM Ambassador

If you have ever wanted to bring an employer from a STEM background into your classroom or STEM/Careers Day, then this information event is for you. In this short session you will hear from one of our ambassadors, their experiences within schools and working with teachers as well as have the opportunity to ask questions about requesting a volunteer.

@STEMLondonHub

https://www.stem.org.uk/stem-ambassadors

## <u>Unplugged and free online ideas to teach computer science with a cross curricular theme</u> with Stacey Jenkins

Unplugged is a collection of free teaching material that teaches Computer Science through engaging games and puzzles that use cards, string, crayons and lots of running around. Join Stacey to take a look at some of the excellent resources on offer. @CompHubLGS

### New EYFS resources & Workshop from Barefoot with Isabella Lieghio

This session will introduce the newest Barefoot resources designed especially for EYFS, including the Springtime resource set and the brand new teacher workshop. Join us and find out how you can use these free resources and activities to help embed computational thinking into your EYFS classroom.



The session will be delivered by Isabella Lieghio, Barefoot author

www.iconlearning.co.uk

@BarefootComp

#### Females and IT careers in the automotive industry with Katy Senior, Ford

Katy Senior is a highly experienced IT manager, with a degree in Computer Science and Modern Languages, and 25 years in the IT industry. Her current role as a senior manager at Ford Motor Company involves leading a group of 100+ Software Engineers, Designers and Technical Anchors, across 3 continents, to provide and run software which supports the sale of Ford vehicles, especially to commercial businesses and fleets.



As a female in a male dominated world, and an ex-Grammar School student, Katy has a passion for encouraging more highly talented girls into the exciting world of IT. By sharing her story and observations, she aims to help facilitate a conversation about how that might be achieved.

https://www.linkedin.com/in/katy-senior-0b657539/?originalSubdomain=uk

### **Tech We Can** with Becky Patel, Tech She Can Charity

Becky Patel is the Head of Early Education for the <u>Tech She Can</u> <u>Charity</u>, a charity with a mission for an equal future, ensuring technology works for all. They have free 'Tech We Can' resources to inspire primary and secondary students to consider a future career in technology. The resources aim to show children how technology is developing and advancing, highlight the breadth of technology roles



they could pursue in the future and introduce the children to diverse and relatable tech role models.

https://www.pwc.co.uk/who-we-are/our-purpose/empowered-people-communities/social-mobility/employability-skills-toolkit/tech-we-can.html

### 'IT is not for Girls' with Jessica Zeun, Ethical Social Group

Jessica is a technology professional with experience in both corporate and academic roles. She her own technology consulting firm for 6 years focusing on digital marketing, social media and website development and loves sharing her experience in technology with young people as a STEM ambassador.



During this session Jessica will explain why IT really is for girls and how the Ethical Social Group have set out to transform the landscape of social media forever to give people a positive experience, as well as the safety and control they deserve.

https://ethicalsocialgroup.com/

https://www.linkedin.com/in/jessicazeun/

### Psychology: a cloak of invisibility for computing with Andy Field, University of Sussex

Andy is a Professor of Quantitative Methods at the University of Sussex, UK. He has published extensively on emotional development in children and 'Stats book guy' – due to his bestselling textbook 'Discovering Statistics using SPSS: and sex and drugs and rock n' roll', which won the British Psychological Society book award in 2007. Join him to hear his views on psychology and computing.



https://www.linkedin.com/in/profandyfield/

#### The Importance of Making 'Connections' with Su Adams, U Can Too

Using computing experiences to inspire the minds of the future, Su Adams from 'U Can Too' loves nothing more than seeing children's eyes light up with excitement when they achieve creative results in her computing workshops.



As the company name suggests, Su is passionate about empowering students to believe that a future in STEM is achievable for themselves. Su achieves this by designing innovative physical computing projects with cross-curricular links, using lights, motors and sensors to create tangible interactions in the real world. Whether this is helping students to develop moving artwork, literacy-linked robots or simple solutions for real-world problems, she never tires of designing and delivering memorable and purposeful learning experiences.

The term enthusiastic is often used to describe Su leading her to develop and deliver content locally, nationally and globally on projects. For example, her annual involvement teaching children to use technology for Climate Action at the World Economic Forum or an outreach project for the University of California Santa Barbara. Su is also a co-director of *Pell Ensemble UK*, A digital dance company; in this role, Su enjoys working with choreographer, Rebecca Evans, to develop projects that combine movement with coding to encourage diversity in computing.

As a Subject Matter Expert and Facilitator for the National Centre for Computing Education (NCCE), Su enjoys empowering schools in developing their computing education offer through teacher CPD and advice.

https://www.linkedin.com/in/suadamsedit/?originalSubdomain=uk

#### #I am remarkable with Leslie Whyte-Venables, STEM Learning

Join Leslie for a Google workshop that empowers women and underrepresented groups to celebrate their achievements in the workplace and beyond. #IlamRemarkable is a global movement and this 30-minute workshop is a taster of the google work that will help participants learn to acknowledge, share and celebrate what makes them remarkable.

https://www.linkedin.com/in/leslie-whyte-venables-4a583811/?originalSubdomain=uk

#### What is Computing at School? with Tim Wilson (CAS Outreach Manager)

Computing at School (CAS) is the leading community for computing teachers in the UK. Find out more about how joining Computing at School can benefit you, your career and your teaching as well as your school and young people.

- Sés .
- Get access to downloadable resources, engage in active discussions and attend events
- Share resources and help other educators
- Get involved with your local CAS Community.

www.computingatschool.org.uk

https://www.linkedin.com/in/mrtimwilson/?originalSubdomain=uk

@CASMidlands, @CompAtSch

#### Diagnostic Assessment for GCSE Computer Science with Dan Smith, Computing Hub

Assessment of subject knowledge informs teaching for education recovery, and also provides evidence for centre-assessed grades replacing traditional examinations. This short webinar introduces the free, quality-assured test banks provided by the National Centre for Computing Education, designed to reduce teacher workload.



https://www.linkedin.com/in/dan-smith-408842212/?originalSubdomain=uk

@ComputingHubSAC

## <u>Inspirational ideas for secondary computing leads</u> with Tim Wilson, CAS Outreach Manager

Computing at School (CAS) is the leading community for computing teachers in the UK. We are run by teachers and educators for teachers and educators. We are passionate for supporting secondary computing leads by providing access to conversations, resources and tips that you can take straight back to the classroom.

No matter where you are at in your career, we provide a safe space for you to access inspirational ideas. In this session, Tim Wilson will share some of these inspirational ideas for secondary computing leads and how being a member of CAS can help you unlock many more amazing ideas.

www.computingatschool.org.uk

https://www.linkedin.com/in/mrtimwilson/?originalSubdomain=uk

@CASMidlands, @CompAtSch

## <u>Pedagogy for teaching CS programming</u> with Stacey Jenkins, London and Home Counties Computing Hub

Culturally relevant pedagogy is a framework that emphasises valuing all learners' knowledge, heritage and ways of learning. By drawing on students' own experiences and cultural knowledge you can ensure that the computing curriculum is relevant, engaging and accessible to all.

https://www.linkedin.com/in/stacey-jenkins-99a2602a/

@CompHubLGS

## Micro:bits, simple demonstration of potential projects as a taster for loaning equipment and CPD with Stacey Jenkins, London and Home Counties Computing Hub

The BBC micro:bit: the pocket-sized computer transforming digital skills learning. Join Stacey to find hear about potential projects that you can recreate in the classroom with our loan kits.

https://www.linkedin.com/in/stacey-jenkins-99a2602a/

@CompHubLGS

### Are you Ofsted ready? with Carmine De Grandis, Compass Education Consultancy Ltd

This is an opportunity for Secondary SLT or Computing teachers and leaders to explore together how Ofsted Deep Dives in computing will be conducted. Reflect on the sequencing of your curriculum intent, implementation, and outcomes as well as the questions inspectors may ask you, your colleagues, SLT, students and governors to determine the contribution computing makes to the overall quality of education at your school.



The question you will be helped to answer is: Am I/Is my department/Are my colleagues ready for an Ofsted Deep Dive? Join us for examples from research and recent Ofsted Deep Dives.

https://www.linkedin.com/in/carmine-de-grandis-1a11729b/?originalSubdomain=uk