

**Name**

Rob Percival, CEO, Blutickl  
Miles Berry, Principal Lecturer in Computing Education, University of Roehampton

**Session**

Developing AI Solutions with schools

## Session Synopsis

Our pupils are likely to find themselves studying and working in a world where AI plays a prominent, and perhaps dominant, role, but how may we best prepare them for such a future. In part, such preparation involves developing their human intelligence to be set alongside the machines' artificial intelligence: creativity, empathy, courage and kindness must remain part of what we nurture. Alongside these characteristics, we might start teaching about AI, how to use it, how to help develop AI solutions and how to think about how we can use it with moral purpose to support humanity. Miles explores one model of curriculum development for AI in schools, adapting the foundations / applications / implications approach that underpins England's computing curriculum and applying this to learning about AI. He draws on the work of the US based AI4K12 group, which he supports as a member of its advisory board, to explore some of the 'big ideas' of AI, and discusses what progression might look like from early years education making use of Alexa, Siri or the Google Assistant through to sixth formers tackling machine learning challenges and debating where moral responsibility rests for decisions taken by machines.

## Speaker Profiles

Miles is principal lecturer in Computing Education at the University of Roehampton. Prior to joining Roehampton, he spent 18 years in four schools, much of the time as an ICT coordinator and most recently as a head teacher. He holds a mathematics degree from Cambridge, worked as a government statistician and now co-authors an annual report on uptake and achievement in computing qualifications throughout England. He is a board member of England's National Centre for Computing Education, Computing At School, the BCS Academy of Computing and the CSTA. He is a fellow of the BCS, RSA, HEA and Chartered College of Teaching, and a member of the Raspberry Pi Foundation. Over the years he has contributed to a number of computing related projects including the national curriculum computing programmes of study, Switched on Computing, Barefoot Computing, QuickStart Computing, CAS TV, Project Quantum, Hello World and the National Centre for Computing Education. He gives regular keynotes and CPD workshops on computing and education technology in the UK and abroad and has worked on a number of international consultancy projects involving technology enhanced learning, curriculum development and CPD.

Rob is the founder and CEO of blutick.com, an AI-based Maths teaching product which gives students intelligent feedback as they work through problems. He was a

Maths teacher for ten years, and is also the founder of [codestars.com](https://www.codestars.com), an online platform which has taught 1.5 million students how to code. After completing his Maths degree at Cambridge University, he went on to complete a PGCE and a Masters in Education, and taught in UK secondary schools until 2012. He created Codestars in 2014 which quickly grew to be one of the biggest suppliers of video-based tech courses in the world. In 2017 he looked at the tools available to Maths teachers, and was surprised to see that none offered intelligent feedback to support students when they made mistakes, an integral part of the learning process. He spent the next two years developing Blutick, which launched in October 2019 and now 10,000 questions are completed each week on the platform by students around the world. He lives with his wife and two boys in Cambridge.