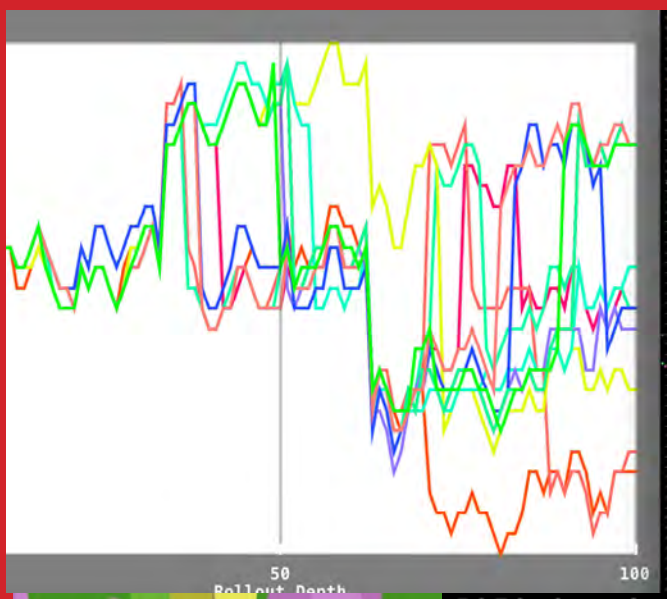
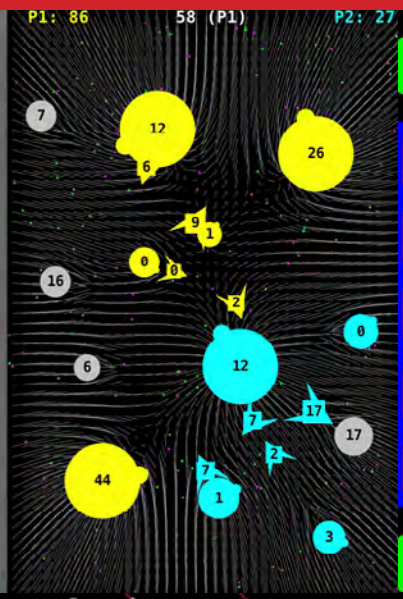
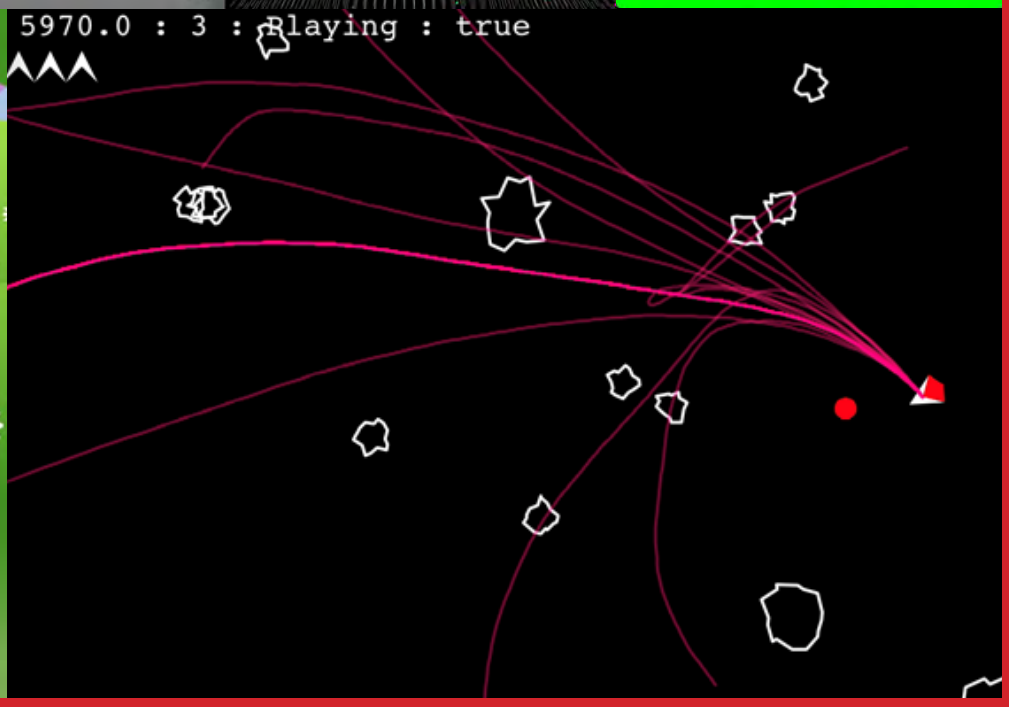
The Institution of Engineering and Technology

Queen Mary University of London

Game AI Unleashed!







The lecture will be followed by drinks and mince pies.
Attendance is free, but please register in advance – see website for details.

eecs.qmul.ac.uk/gameai

5 December 2018
Doors Open at 5pm for a 5:30pm start.
Ends 6:30pm followed by reception
Location: The Great Hall,
Queen Mary University of London
Mile End Road, E1 4NS

Game AI Unleashed!

Games have always pushed the boundaries of AI since the dawn of the field in the 50s and 60s. For many decades the main challenge was to make AI that would be super-human at even the most demanding games. The initial focus was on classic games like Chess and Go, but AI researchers are now tackling something even tougher: Video Games like StarCraft and DOTA 2, and making more general AI that can learn to play any game. We're also making AI that creates new games and new game content, and then hands over to some AI friends to test them!

Join us to learn more about this fascinating field and also play some new games we guarantee you will not have played before. Will they be any good though? Come and decide for yourselves…

Simon Colton. I'm a professor of Computational Creativity at Queen Mary University of London and Monash University in Australia. I look at what it means for software to be genuinely creative in arts and science projects, and what benefits for society this could bring. I've been involved in projects where AI systems have made mathematical discoveries; painted pictures for international exhibitions; invented ideas for a West-end musical; and generated whole new videogames. We've used these creative AI systems to help us understand the philosophical nature of creativity itself and to enable and empower people to be creative, for instance by democratising game design - so that anyone and everyone can make videogames, with a bit of help from an AI co-creator!

Raluca Gaina. I am a research student in Game AI at Queen Mary University of London and part of the Intelligent Games and Games Intelligence (IGGI) programme, having recently completed an internship at Microsoft Research. My work is focused on developing AI based on evolutionary methods, that is capable of better planning and decision making in any games, even those it hasn't seen before and knows nothing about. This allows for easy and flexible game testing, as well as smarter opponents for interesting gameplay.

Simon Lucas. I am a professor of AI at Queen Mary University of London and also the director of the Game AI Research Group. My research involves developing powerful AI that learns to play new games, providing a diverse supply of AI opponents and tireless play-testers. Real-world problems can also be modelled as games, and we can then use this general AI to help solve them or at least provide fresh insights, and help to make the world a better place.

Vanessa Volz. I am a research associate at Queen Mary University of London and working in the area of Game AI. I have developed an algorithm that is able to optimise a problem, even though the outcome of its solutions are uncertain. This is important for game-related problems, as most games contain random elements. Additionally, players change their behaviour and seldom make the same mistakes twice. I have used this algorithm to help generate decks in card games as well as levels for platformers, for instance.

5 December 2018
Doors Open at 5pm for a 5:30pm start.
Ends 6:30pm followed by reception
Location: The Great Hall, Queen Mary University of London, Mile End Road, E1 4NS