Smart Imaging for Development

Sandpit and Seed Funding Competition

Murray Edwards College

26 – 27 November 2019

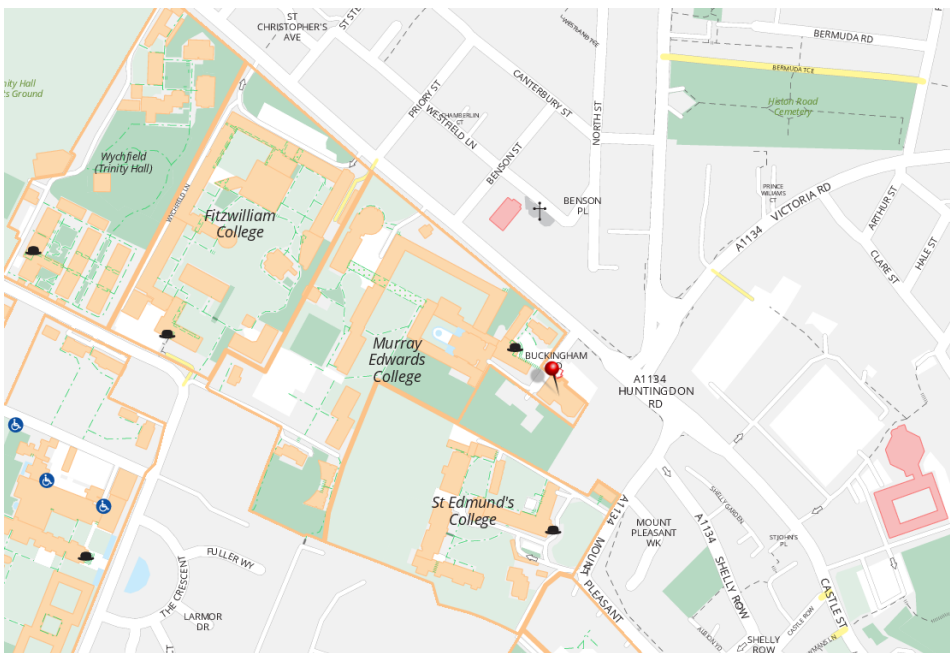## Programme

Day 1 – 26 November 2019

Morning session		
9:00 – 9:15	David Good	Introduction to the sandpit
9:15 – 9:45	Shorn Molokwane	Presentation of challenge themes – Challenge definition canvas
9:45 – 11:00	Shorn Molokwane	Needs assessment exercise – Overview and case studies
11:00 – 11:15	Coffee break	
11:15 – 12:30	John Stevens	Design methodologies
12:30 – 13:15	Lunch	
Afternoon session		
13:15 – 13:45	Francesco Ciriello	Computer vision deployment on hardware made easy
13:45 – 14:15	Jim Haseloff	Arduino hardware
14:15 – 14:45	Marwa Mahmoud and James Allingham	Machine learning capabilities and weaknesses
14:45 – 15:15	Coffee break	
15:15 – 18:00	All	Creative ideation activities – Lead by John Stevens
19:15	Dinner, Council Room, Murray Edwards College	

Morning session		
9:30 – 9:45	Jim Haseloff	Introduction to day 2
9:45 – 10:15	All groups	Decide on an idea to develop into concept – Supported by Shorn and John
10:15 – 10:30	Coffee break	
10:30 – 12:30	All groups	Exploration with physical sketch, modelling, prototyping, hacking – Supported by Shorn and John
12:30 – 13:15	Lunch	
Afternoon session		
13:15 – 14:45	All groups	Exploration with physical sketch, modelling, prototyping, hacking – Supported by Shorn and John
14:45 – 15:00	Coffee break	
15:00 – 16:15	All groups	Final concept presentations
16:15 – 17:00	Jim Haseloff and David Good	Results and close

Venue

**Murray Edwards College
Huntingdon Rd
Cambridge, CB3 0DF**

Day 1 Buckingham House Lecture Theatre and Seminar Room, see pin on the map on the left

Day 2 Long Room, near the Porters' Lodge in the main building

People

David Good
University Lecturer, Department of Psychology and Director of Research, Cambridge Global Challenges Strategic Research Initiative, University of Cambridge
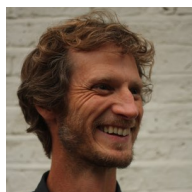
Jim Haseloff
Professor, Department of Plant Sciences and Director Synthetic Biology Strategic Research Initiative, University of Cambridge
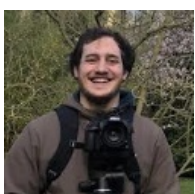
Shorn Molokwane
Senior Product Designer, Botswana Institute for Technology Research and Innovation (BITRI), Gaborone

John Stevens
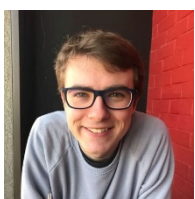Senior Tutor, Global Innovation Design, Royal College of Art, London

Francesco Ciriello
Education Customer Success Engineer, Mathworks, Cambridge

Marwa Mahmoud
Research Fellow, Department of Computer Science and Technologies, King's College, University of Cambridge

James Allingham
PhD student, Department of Engineering, Cambridge, University of Cambridge and Deep Learning Consultant, Wolfram Research

Sara Serradas Duarte
Programme Manager, Cambridge Global Challenges Strategic Research Initiative, University of Cambridge

Oliver Hadeler
Programme Manager, CamBridgeSens Strategic Research Network, University of Cambridge

Mohammed Alawami	Sensor CDT, Department of Chemical Engineering and Biotechnology
Ronita Bardhan	Department of Architecture
Paolo Bombelli	Department of Biochemistry
Simon Fairclough	Department of Materials Science and Metallurgy
Silvia Ferreri	Department of Archaeology
Gemma Goodfellow	Sensor CDT, Department of Chemical Engineering and Biotechnology
Rijak Grover	Department of Sociology
Cassi Henderson	Department of Chemical Engineering and Biotechnology
Ying Jin	Department of Architecture

Rihuan Ke   Department of Applied Mathematics and Theoretical Physics

Kellly Kooke   MRC Epidemiology Unit

Sohaib Abdul Rehman   PDN

Thomas Reitmaier   Swansea University

Yudan Ren   MRC LMB