Creative Machine

OXFORD 2023

CHENG KAR SHUN DIGITAL HUB

JESUS COLLEGE, UNIVERSITY OF OXFORD

TUESDAY 30TH MAY 2023

09.50 AM	**Registration**	ENTRANCE	
10.20 AM	**Opening Comments**	MAIN SPACE	**PROF WILLIAM LATHAM** Goldsmiths **DR JANINA SCHUPP** Jesus College, Oxford **PROF DAVID OSWELL** Goldsmiths
10.30 AM	**Can AI be Creative?**	MAIN SPACE	**STEVE COLLINS** CTO King.com **PROF FREDERIC FOL LEYMARIE** Goldsmiths **SOUGWEN CHUNG** Artist and Researcher Chair **MELISSA HEIKKILÄ** MIT Technology Reivew
11.30 AM	**Break and Exhibition Demos**		
12.00 PM	**AI as a Partner**	MAIN SPACE	**DR PIOTR MIROWSKI** Deepmind **JON McLOONE** Wolfram Research Europe **PROF FRIDOLIN WILD** IET, Open University Chair **MELISSA HEIKKILÄ** MIT Technology Review
13.00 PM	**Lunch and Exhibition Demos**		
14.00 PM	**Better than Bach? AI and Music**	MAIN SPACE	**PROF DAVID DE ROURE** Engineering Science, Oxford **PROF MARK d'INVERNO** Goldsmiths **DR FRANÇOIS PACHET** Spotify Chair **DR ROBERT LAIDLOW** Jesus College, Oxford
SIMULTANEOUS TALKS	**AI and Visualisation for Scientific Discovery**	SPACE TWO	**PROF SHANKAR SRINIVAS** DPAG, Oxford **PROF JIM HUGHES** Weatherall Institute, Oxford **PROF LARISA SALDATOVA** Goldsmiths Chair **STEVE TAYLOR** Wellcome Trust Centre for Human Genetics, University of Oxford
15.00 PM	**Break and Exhibition Demos**		

SIMULTANEOUS TALKS

15.20 PM	**Curating AI and Digital Art**	MAIN SPACE	**ABIGAIL MILLER** Unit London Gallery **DR OONAGH MURPHY** Goldsmiths **PITA ARREOLA** V&A Museum **PROF IRA GREENBERG** Meadows Schools of Arts, SMU, USA Chair **LUBA ELLIOTT** AI Curator
	Human Intelligence. The Workings of the Human Brain	SPACE TWO	**DAVID YANN ROBERT** and **LELAND HEPLER** Boston Dynamics **PROF EDMUND ROLLS** Computational Neuroscience, Warwick **PROF PARASHKEV NACHEV** Inst. of Neurology, UCL Chair **PROF HOLLY BRIDGE** NDCN, Oxford
16.30 PM	**Break and Exhibition Demos**		
17.00 PM	**AI Impact and Implications for Society. Panel Discussion**	MAIN SPACE	**PROF JOHN TASIOULAS** Philosophy, Oxford **PROF MARINA JIROTKA** Computer Science, Oxford **DR JACOMO CORBO** PhysicsX Chair **PROF SIR NIGEL SHADBOLT** Computer Science and Jesus College, Oxford
18.00 PM	**Networking, Drinks and Exhibition Demos**	MAIN SPACE	
20.00 PM	**End**		

SYMPOSIUM ORGANISERS

PROF WILLIAM LATHAM
Department of Computing, Goldsmiths

DR JANINA SCHUPP
Jesus College, Oxford

PROF FREDERIC FOL LEYMARIE
Department of Computing, Goldsmiths

STEVE TAYLOR
Wellcome Trust Centre for Human Genetics, University of Oxford

TURING NETWORK AWARD LEAD

PROF LARISA SALDATOVA
Department of Computing, Goldsmiths

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The Alan Turing Institute

Cheng Kar Shun DigitalHub at Jesus College

Jesus College OXFORD

Goldsmiths UNIVERSITY OF LONDON

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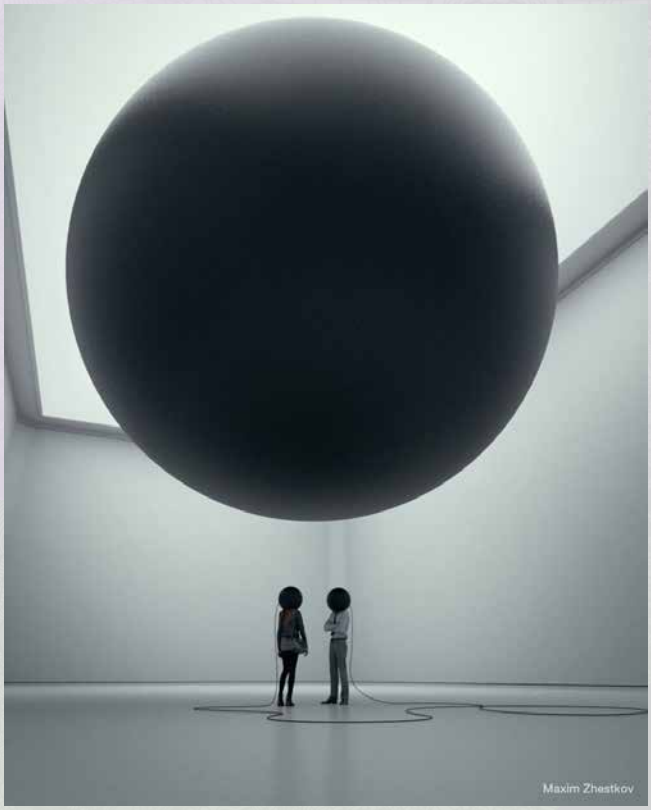
SYMPOSIUM TALK THEMES

CAN AI BE CREATIVE?

The fundamental question of whether a computer can be more creative than a human is a current and contentious topic of debate. Leading speakers from Academia and Industry will address this theme. Are the software techniques we have now merely giving the illusion of creativity but not providing 'real' creativity? Should an AI system emulate the human, or should the system be something completely different? Will the computer ultimately be more creative than the human? Other important topics such as "How do you measure human or machine creativity?" will be covered along the way.

AI AS A PARTNER

Hybrid systems where control is switched back and forth between the human and a computer AI over time have many benefits. Creatives often feel comfortable with these systems. Is this getting the best of both worlds from a Human and Machine perspective? Or are we ultimately limiting the machine's creative potential, which may be constrained and "slowed down" by the human's limited conceptual framework and interaction? Or is it the opposite?



BETTER THAN BACH? AI AND MUSIC

Leading composers, musicians, and music technologists from industry and academia will outline their work in AI and music and consider the opportunities and challenges of developing AI computer systems to support the processes of composition and performance. The speakers will discuss under what conditions AI can stimulate and provoke new kinds of creative musical expression and whether there are any conditions under which systems can "post-compose" or even "out-compose" the composer. The role of AI in musical creative expression will be explored through live human / AI improvisation that sets out to understand the musical experiences of both performers and listeners.

AI AND VISUALISATION FOR SCIENTIFIC DISCOVERY

Can an AI "out-think" and "out-observe a scientist"? Or are current AI systems just useful statistical engines only as good as the huge quantity of

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SYMPOSIUM TALK THEMES

data they process combined with the fine-tuning of AI filters? Can a machine independently observe and come up with a novel hypothesis? Leading speakers in this section explore these questions using examples from their own research work and the wider field.

HUMAN INTELLIGENCE: THE WORKINGS OF THE HUMAN BRAIN

As a counter balance to the computing and technology AI topics being discussed through the day, in this section Neuroscience and Medical experts explain how the human brain functions, providing insight, reflections and comparisons with the AI processes and technology. The section will, in addition, cover human perception and the cognitive processing of ideas. As a final question, we will cover “How does the human brain drive creativity?”

CURATING AI AND DIGITAL ART PANEL

Digital Art and AI have finally reached the Artworld! Led by leading Museum and Gallery Curators specialising in exhibiting digital and AI art, the panel will discuss the challenges of curating and selecting art works in this emerging art field and how to engage the public and art market. The challenges of identifying human artistic authorship and NFTs will also be discussed.

AI IMPACT AND IMPLICATIONS FOR SOCIETY PANEL

Professor Sir Nigel Shadbolt, Jesus College Principal and Professorial Research Fellow in Computer Science at the University of Oxford, will host a keynote panel discussion exploring the impact and implications to society of AI in the 21st century.

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