«Oxford-Waseda Computer Science Symposium»

Program

16:30-16:32 Opening by Chairman, Dr. Peter Braam

16:32-16:35 Opening remarks by Prof. Hironori Kasahara

16:35-16:47 Waseda Professor 1 Prof. Hayato Yamana, Big Data, VP Waseda, IEEE CS BoG

【*Title*】*Secure Computation Anywhere with Fully Homomorphic Encryption*

16:47-16:59 Oxford Professor 1 Professor Jeremy Gibbons, Oxford University

【*Title*】*"Programming Languages at Oxford".*

16:59-17:11 Waseda Professor 2 Prof. Nozomu Togawa, Quantum and Security, Dean, Waseda Univ.

【*Title*】*Quantum Computing and Security at Waseda University*

17:11-17:23 Oxford Professor 2　(Dr. Matt Perkins, the CEO of Oxford University Innovation

【*Title*】*Innovation at Oxford*

17:23-17:35 Waseda Professor 3 (Prof. Hironori Kasahara: SEVP Waseda, IEEE CS President 2018

【*Title*】*Green Multicore Computing*

17:35-17:47 Oxford Professor 3 (Candidate: Prof. Sir Nigel Shadbolt)

【*Title*】*'Silicon Spires: Computer Science in Oxford'*

17:47-17:50 Closing Remarks by Jeremy

«Oxford University»

Chairman

Peter Braam

https://www.braam.io/

My work is in the area of systems software, data-intensive computing, and machine learning (ML). I utilize the interplay of novel hardware, programming languages, and distributed algorithms to introduce scalability and performance and to eliminate complexity. I explore ML computing platforms and its use as a scientific method for the physical sciences, for example as an alternative to scientific simulation. Presently I'm active in academic work as a visiting professor in Oxford, as a consultant to the SKA radio telescope effort and I'm a formal or informal advisor to many efforts. To perform my role as a thinking partner for technical and research efforts, I do research, explore technologies, give lectures, and lead projects. I spend much time in academic environments, but also founded and led several startup companies and held executive positions in large enterprises. I enjoy both academic and commercial work environments and integrate their efforts when I can.

1.Jeremy Gibbons

https://www.cs.ox.ac.uk/people/jeremy.gibbons/

Jeremy Gibbons is Professor of Computing at the University of Oxford, where he leads the Algebra of Programming research group, and teaches on the part-time professional master's programme in Software Engineering. He is also a Fellow of Kellogg College, Oxford. He is Editor-in-Chief of the Journal of Functional Programming; in the past, he has served as Chair of IFIP Working Group 2.1 on Algorithmic Languages and Calculi, and as Vice Chair of the ACM Special Interest Group on Programming Languages. Before this position, he held lectureships at Oxford Brookes University and at the University of Auckland, New Zealand.

2.Matt Perkins

Perkins Matt - Oxford University Innovation

Dr Matt Perkins joined Oxford University Innovation (OUI), the research commercialisation arm of Oxford University, in October 2016 during a time of both great change and growth for the company. Over 2016, OUI saw its spinout company rate double, while the wider innovation ecosystem around Oxford continues to evolve rapidly. As OUI's Chief Executive Officer, it is Dr

Perkins' responsibility to guide OUI through these changing times to have an even greater impact, and to pioneer ways in which OUI can continue to enhance its offer to the University and the surrounding ecosystem.

Prior to taking on the CEO role at OUI, he was President of Space Imaging at e2v for 18 months where he assembled a new management team to help transform the division. Space was also a focus for the previous eight years, spent as Group CEO at Surrey Satellite Technology ltd, the world's leading small satellite mission provider. Matt held a variety of technical and management roles for Filtronic Comtek (part of Filtronic plc) from 1993 to 2007, including setting up manufacturing in China, bolstering the growth of a business unit and leading the global engineering and project management teams.

3.Nigel Shadbolt

http://www.cs.ox.ac.uk/people/nigel.shadbolt/

Professor Sir Nigel Shadbolt is a leading researcher in Artificial Intelligence (AI) and was one of the originators of the interdisciplinary field of Web Science.   He is Principal of Jesus College Oxford and a Professor of Computing Science at the University of Oxford. He is chairman of the Open Data Institute which he co-founded with Sir Tim Berners-Lee. In 2009 he was appointed Information Advisor by the Prime Minister and, working with Sir Tim Berners-Lee, led the development of the highly acclaimed data.gov.uk website.   In 2010, he joined the UK government's Public Sector Transparency Board – overseeing Open Data releases across the public sector.   He was knighted in 2013 for 'services to science and engineering'.

  Nigel has a degree in Philosophy and Psychology from the University of Newcastle and a PhD in Artificial Intelligence from the University of Edinburgh. In 1983 he joined the Department of Psychology at Nottingham where he established and led a vibrant AI group. In 1992 he became the Allan Standen Professor of Intelligent Systems. He moved to Southampton's School of Electronics and Computer Science in 2000. At Southampton he researched the next generation of the World Wide Web and was the first Head of the Web and Internet Science Group.   At Oxford he has centred his research in human centred AI in a wide range of applications.   Most recently he was asked to lead the setting up of the Oxford Institute of Ethics in AI.

  With over 500 publications, he has researched and published on topics ranging from cognitive psychology to computational neuroscience, Artificial Intelligence to the Semantic Web.   In 2018 he published *The Digital Ape: how to live (in peace) with smart machines*, described as a 'landmark book'.

  He is a Fellow of The Royal Society, the Royal Academy of Engineering and the British Computer Society.

«Waseda University»

1.Prof.Hayato Yamana

Hayato Yamana received a Dr. Eng. degree at Waseda University in 1993. He began his career at the Electrotechnical Laboratory of the former Ministry of International Trade and Industry (MITI), and was seconded to MITI's Machinery and Information Industries Bureau for a year in 1996. He was subsequently appointed associate professor of Computer Science and Engineering at Waseda University in 2000, and has been a professor since 2005. Since 2010, he has been director of DBSJ (Database Society of Japan). He was director of IPSJ (Information Processing Society of Japan) and vice chair of the Institute of Electronics, Information and Communication Engineers (IEICE)'s Information and Communication Society. At Waseda University, he was Deputy Chief Information Officer from 2015 to 2020. Since Oct. 2020, he has been Vice President for IT Promotion and Chief Information Officer. His research interests include big data analysis and computer architecture.

2.Nozomu Togawa

Nozomu Togawa received the B.Eng., M.Eng., and Dr.Eng. degrees from Waseda University in 1992, 1994, and 1997, respectively, all in electrical engineering. He is presently a Professor in the Department of Computer Science and Communications Engineering and the Dean of the School of Fundamental Science and Engineering, Waseda University.

His research interests include quantum computing, hardware security and their related applications.

3.Hironori Kasahara

Prof. Hironori Kasahara is Senior Executive Vice President, Waseda Univ. He was IEEE Computer Society President 2018. He is IEEE Fellow, Professional Member of IEEE HKN, IPSJ Fellow, Director of Engineering Academy of Japan, Member of the Science Council of Japan. He received the Spirit of IEEE Computer Society Award, CS Golden Core Award, IFAC World Congress Young Author Award, IPSJ Contribution Award, and Science and Technology Prize from the Minister of MEXT. He obtained BSEE in 1985 and PhD in 1985 from Waseda Univ., joined its faculty in 1986, and has been a professor of computer science since 1997 and a director of the Advanced Multicore Research Institute since 2004. He was a visiting scholar at UC Berkeley and Univ. of Illinois at Urbana–Champaign's Center for Supercomputing R&D.