

# Department of Computer Science Distinguished Lecture Series

2021  
/22



## Prof. John Daugman

Professor of Computer Vision and Pattern Recognition  
Cambridge University, United Kingdom

**8 March 2022 (Tuesday) 5:00-6:00pm GMT+8 (Hong Kong Time)**  
via Zoom (The meeting details will only be provided to registrants.)

## Personal Identity, Artificial Intelligence, and Biometric Entropy

### Abstract

Questions of human identity take many forms, including: (1) the mind/brain problem: how our mental life and consciousness arise from neural activity in the brain; (2) the relationships among concepts of personhood, society, and the state (who is master, who is servant); and (3) how the identities of different persons can be visually distinguished from each other. Recent progress in artificial intelligence and machine learning gives perspectives on all these topics. This lecture will discuss several aspects of the Identity questions, focusing mainly on computational neuroscience, computer vision, automatic face and iris recognition, and the concept of biometric entropy. Understanding big biometric entropy has resulted in 1.5 billion persons worldwide being enrolled by their iris patterns (including 1.3 billion in India for the UIDAI welfare benefits distribution scheme), after US Government tests involving trillions of iris comparisons, using the speaker's algorithms.

### Biography

John Daugman received his degrees at Harvard University and then taught at Harvard before coming to Cambridge University, where he is Professor of Computer Vision and Pattern Recognition. He has held the Johann Bernoulli Chair of Mathematics and Informatics at the University of Groningen, and the Toshiba Endowed Chair at the Tokyo Institute of Technology. His areas of research and teaching include computer vision, information theory, neuro computing, and statistical pattern recognition. Awards for his work in science and technology include medals from the British Computer Society, and the OBE (Order of the British Empire) from The Queen. He has been elected to Fellowships of: the UK Royal Academy of Engineering; the US National Academy of Inventors; and the Institute of Mathematics and its Applications. He has been inducted permanently into the US National Inventors Hall of Fame. He is the founder and benefactor of the Cambridge Chrysalis Trust.



Event Registration :  
<http://bit.ly/bucs-ereg>

