



Prof. Ashwin A. Seshia, Department of Engineering, University of Cambridge.

Biography: Ashwin Seshia received the B.Tech. degree in Engineering Physics from IIT Bombay in 1996, the M.S. and Ph.D. degrees in Electrical Engineering and Computer Sciences from the University of California at Berkeley, Berkeley, in 1999 and 2002, respectively, and the M.A. degree from the University of Cambridge in 2008. He joined the Faculty of the Engineering Department at the University of Cambridge in 2002, where he is currently the Professor of Microsystems Technology and a Fellow of Queens' College.

He heads the MEMS research group at the Cambridge University Nanoscience Centre, and is also a co-investigator of the Cambridge Centre for Smart Infrastructure and Construction. He has published over 200 peer-reviewed research papers in the area of MEMS and is a co-inventor on over 20 granted patents / patent applications, particularly in areas relating to linear and non-linear resonant microsystems, and applications to sensors and sensor systems. He is a co-founder, CSO and non-executive director of Silicon Microgravity Ltd., a Cambridge University spin-out developing MEMS gravimeter technology for sub-surface monitoring of fluids based on research in the field of resonant and mode-localised MEMS inertial sensors. He is also a co-founder of 8power Ltd., a University spin-out currently developing self-powered wireless sensors for civil structural health and industrial monitoring. Both companies were formed to translate technologies developed in Ashwin's research group. He has collaborated extensively with academia and industry, and has held visiting appointments at UC Berkeley and Stanford University.

Ashwin is a Fellow of the Institute of Physics (IoP) and the Institution of Engineering and Technology (IET). He serves as Editor for the IEEE Journal of Microelectromechanical systems (JMEMS) and Associate Editor for the IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control. He has previously served on the editorial boards for the IoP Journal of Micromechanics and Microengineering and the IEEE Transactions on Nanotechnology. Ashwin has also served on several conference program committees including the IEEE Frequency Control Symposium and the European Frequency and Time Forum, as well as the IEEE MEMS Conference and IEEE International Electron Devices Meeting. He is an elected member of the Executive Committee of the European Frequency and Time Forum. In 2018, he received the IEEE Sensors Technical Achievement Award (Advanced Career - Sensor Systems) "for pioneering contributions to resonant microsystems with application to sub-surface density contrast imaging and energy harvesting systems".