I am a Principal Research Associate and the Department of Physics (Cavendish Laboratory), University of Cambridge. My research in centered on technologies which will enable next-generation radio astronomy telescopes and science. Currently I am the Project Engineer and the Architecture Leader for the Square Kilometre Array (SKA) Science Data Processor -- an international radio astronomy project that will be one of the one leading big-data science exemplars of the next decade. In this role I set the technical direction for a team of about 50 scientist and engineers working to design and develop the software and computing system for the processing of SKA data into science-ready images and other data products.

Previously I participated in construction and commissioning of ALMA, the largest ground-based astronomy project. There I helped develop the radiometric phase correction system that corrects for the disturbance to the received signal caused by turbulence in the Earth's atmosphere enabling an improvement in resolution of more than a factor of 20 compared to previous telescopes.

Previously to that I helped construct and commission the world's largest single-dish telescope (the Green Bank 100-m Telescope) and I also worked as a quantitative developer at Deutsche Bank in London. I have a first degree in Natural Sciences and a PhD in observational astronomy from the University of Cambridge.