

Summary My career has primarily focused on research in mathematics, artificial intelligence, and computer-supported collaborative learning. I have developing expertise in innovation, organisational culture change, and facilitation of large-scale research networks.

Skills Problem analysis and design synthesis, research methods, computer programming, writing, instruction; business models, applied systems thinking, working with diverse stakeholders.

Technologies Linux, Git/Github, Clojure/LISP, HTML5+JS, MySQL, SPSS, R, PHP/Drupal, Lean, Java, Python, Semantic Web

Current Positions

Open Research Project Manager, Oxford Brookes University (OBU) (since 1/2023)

I am employed on the Research England project “Growing and Embedding Open Research in Institutional Practice and Culture”. I also co-lead the university’s AI and Data Analysis Network.

Director, Hyperreal Enterprises, Ltd. (since 6/2019)

Consulting on new citizen science and open data initiatives, with clients including the University of the West of England and Oxfordshire County Council.

Previous Professional Experience

Research Fellow, Institute for Ethical AI, Oxford Brookes University (10/2020-12/2022)

❖ *innovation in AI for mathematics: £1.5m EPSRC proposal rated 16/18: “(very) strong”*

Associate Lecturer, Engineering, Computing & Maths, Oxford Brookes University (2021-2022)

❖ *taught graduate and undergraduate data analysis courses; supervised Data Analytics MSc*

Hourly Paid Lecturer, Department of Digital Humanities, King’s College London (2021-2022)

❖ *supervision of 7 Master’s theses in Digital Humanities; delivered tutorials on web programming*

Member of cohort LD14 at Entrepreneur First, a selective deep tech incubator programme (2020)

❖ *research into consumer demand for AI tutoring systems, resulting in a design specification*

Software Engineer (Clojure), Open Markets, developing a healthcare equipment marketplace (2019)

❖ *engineered 10x growth of user base, with new single-sign-on feature for private client*

Research Associate, “MathSoMac”, School of Informatics, University of Edinburgh (2016-2019)

❖ *published in ‘Artificial Intelligence’ (IF: 14.05); co-developed new “Data Science for Design” course*

Research Associate, “COINVENT”, Computing, Goldsmiths, University of London (2014-2016)

❖ *authored the ‘Best Paper’ at Computational Creativity conference (ICCC 2016)*

Research Assistant, “DECIPHER”, Knowledge Media Institute, The Open University (2013)

❖ *developed a recommender system for museum professionals built on semantic web technologies*

Editor in the Peeragogy Project, facilitating a collaborative investigation of peer learning (2012-)

❖ *edited the Peeragogy Handbook; podcast host; developed “Open Future Design” methodology*

Co-Director of PlanetMath.org, Ltd., which created an online mathematics encyclopedia (2005-2014)

❖ *developed ‘Planetary’: Finalist in Elsevier’s Executable Papers challenge*

Education

- PhD, Computing, The Open University. 2014.
- BA (Hons), Mathematics, New College of Florida. 2002.