# Key skills

Research ( 0000-0003-1330-4698); Programming ( holtzermann17); Creativity ( 9LeoRiW9aAc)

#### Endorsement

"I believe this is one of the most interesting proposals I have ever come across in my role as EPSRC proposals reviewer." — Anonymous Reviewer of "An AI Assistant for Mathematics"

## Summary

At Oxford Brookes, I am currently working with a consortium of 20+ UK universities to bring about sectoral change by "Growing and Embedding Open Research in Institutional Practice and Culture". My research focuses on *learning*, *applied AI*, and *social machines*. I co-lead the university's AI and Data Analysis network, and offer external consulting on participatory design and citizen science through my company, Hyperreal Enterprises.

### Current Positions

Open Research Project Manager, Oxford Brookes (since 1/2023)
Director, Hyperreal Enterprises, Ltd. (since 6/2019)

## Experience

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

wrote £1.5m EPSRC grant proposal rated strong to very strong by independent reviewers.1

Associate Lecturer, Engineering, Computing and Mathematics, Oxford Brookes (2021-2022)

\* taught graduate and undergraduate data analysis courses; MSc thesis supervision

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

supervised 7 Master's theses and led web programming tutorials

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

\* market research on AI tutoring applications, identifying priority areas for future grant proposals

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

♦ 10x growth of user base, with new single-sign-on feature

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)

\* awarded 'Best Paper' at leading Computational Creativity conference (ICCC 2016)

Editor in the Peeragogy Project, developing design patterns for effective peer learning (since 2012)

led production of three editions of the Peeragogy Handbook; hosted 15 podcast episodes

Member of the Board of Directors of PlanetMath.org, an online encyclopedia of mathematics (2005-2014)

\* developed 'Planetary' (Drupal + Semantic Web): Finalist in Elsevier's Executable Papers challenge

### Education

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