Summary

My career has primarily focused on research into collaborative knowledge production. I have developing expertise in innovation, culture change, and facilitation of research networks.

Aim

I am seeking a new role that integrates my technical, interpersonal, and organisational skill sets.

Qualities and skills

I am a creative thinker, confident communicator, and enthusiastic collaborator—also a lifelong learner. I have a strong mathematical and computer programming background, and corresponding analysis and design skill sets. I have considerable on-the-job experience with writing, instruction, and mentoring. I am comfortable working with colleagues at all levels of seniority and engaging 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

(since 1/2023)

I work primarily on the Research England project "Growing and Embedding Open Research in Institutional Practice and Culture", as part of a 20+ member consortium of UK universities. I am leading on the evaluation of a train-the-trainer programme, in which 180 trainers will disseminate open research practices to 2700 local trainees. I assist with other tasks in Brookes's Research Innovation and Enterprise Directorate, including training design and delivery, data analysis, and leading local research networks.

Director, Hyperreal Enterprises, Ltd.

(since 6/2019)

I consult on new citizen science and open data initiatives. Clients included the University of the West of England and Oxfordshire County Council.

Previous Professional Experience

Role	Responsibilities	Results
Research Fellow Institute for Ethical AI, Oxford Brookes University (10/2020-12/2022)	researchgrant writing	innovation in mathematical AI: £1.5m EPSRC proposal rated 16/18: "(very) strong"; and in virtue ethics applied to AI [3]
Associate Lecturer Engineering, Computing & Mathematics, Oxford Brookes University (2021-2022)	teachingsupervision	taught undergraduate and post- graduate data analysis; super- vised Data Analytics MSc thesis "Code is Data"
Hourly Paid Lecturer Department of Digital Humanities, King's College London (2021-2022)	teachingsupervision	supervision of 7 Master's theses in Digital Humanities; delivered tutorials on web programming
Member of cohort LD14 Entrepreneur First, a selective deep tech incubator programme (2020)	product designmarket research	research into consumer demand for AI tutoring systems, result- ing in a design specification and business plan

Software Engineer (Clojure)

Open Markets, developing a healthcare equipment marketplace (2019)

Research Associate

"MathSoMac", School of Informatics, University of Edinburgh (2016-2019)

Research Associate

"COINVENT", Computing, Goldsmiths, University of London (2014-2016)

Research Assistant

"DECIPHER", Knowledge Media Institute, The Open University (2013)

Editor

The Peeragogy Project, a collaborative investigation of peer learning (2012-)

Co-Director

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

programming

quality assurance

- research
- academic writing
- course design
- teaching
- research
- academic writing
- research

academic writing

- mentoring
- facilitation
- writing & editing
- strategy
- outreach
- programming

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

published papers [1, 2] on mathematical knowledge production; co-developed "Data Science for Design" course

authored the 'Best Paper' at Computational Creativity conference (ICCC 2016)

developed a Semantic Webbased recommender system for museum professionals

created co-design methods [4, 5]; edited the Peeragogy Handbook; hosted the Peeragogy in Action podcast

developed 'Planetary' with the KWARC research group (selected as a Finalist in Elsevier's Executable Papers challenge)

Education

PhD, Computing, The Open University. 2014.

BA (Hons), Mathematics, New College of Florida. 2002.

Selected publications

- 5. JC, Alhasan, N., Vivier, L., Murphy, A., Puzio, R. S., Tabor, A., Ayloo, S., Pierce, C., Danoff, C. J., Tedeschi, M., Singh, M., & Khetan, K. (2023). *Patterns of Patterns II*. To appear in Proceedings of Pattern Languages of Programs 2023.
- 4. JC, Murphy, A., Puzio, R. S., Vivier, L., Alhasan, N., Danoff, C. J., Bruno, V., & Pierce, C. (2022). *Patterns of patterns: A methodological reflection on the future of design pattern methods*. In S. Inayatullah, R. Mercer, I. Milojević, & J. A. Sweeney (Eds.), *CLA 3.0: Thirty Years of Transformative Research*. Tamkang University Press
- 3. Crook, N., & JC. (2021). *The anatomy of moral agency: A theological and neuroscience inspired model of virtue ethics. Cognitive Computation and Systems*, *3*(2), 109–122.
- 2. Pease, A., Lawrence, J., Budzynska, K., JC, & Reed, C. (2017). *Lakatos-style collaborative mathematics through dialectical, structured and abstract argumentation*. *Artificial Intelligence*, 246, 181–219.
- 1. JC, Martin, U., Murray-Rust, D., Pease, A., Puzio, R., & Rino Nesin, G. (2017). *Modelling the way mathematics is actually done*. In M. Sperber, J. Bresson, M. Santolucito, & A. McLean (Eds.), 2017 International Workshop on Functional Art, Music, Modelling and Design (FARM 2017). ACM.

Full list of publications

https://orcid.org/0000-0003-1330-4698

References

Available upon request.