

GEORGE PARISH

+44 7501 069 277 • georgemparish@gmail.com • www.linkedin.com/in/george-parish/ • www.georgeparish.co.uk

Summary

Researcher and theoretical modeller, working in neuroscience to understand human memory. Background in machine learning and games development. Keenly interested in history and social sciences. Creative and analytical, looking to produce predictive models of complex phenomena.

Experience

Research Fellow, University of Birmingham, 2019-March 2022

- Exploring human episodic memory formation and retrieval through models and data analysis;
- Transforming PI's theories into workable mathematical frameworks;
- Building relationships with epilepsy patients while collecting human intra-cranial data;
- Importing and analysing very large datasets of brain electro-physiological data using statistical models;
- Creating and disseminating code to fellow practitioners;
- Supervising two Master's students' projects;
- Training colleagues in computational modelling.

Graduate Teaching Assistantship, University of Kent, 2014-2019

- Led lab sessions for MSc Cognitive Neural Networks and seminars for BSc Mathematics for Computing;
- Organised annual PhD mini-conference.

Conference and workshop attendance:

- Speaking presentation at CEMS 2019 (Philadelphia);
- Poster presentations at UK Neural Computation 2019 (Nottingham); WIRED 2019 (Paris); SfN 2021 (online);
- Attended workshops at Neuro Anatomy 2015 (London); NEST User Workshop 2015 (Geneva); Mathematics of Memory 2018 (Barcelona).

Customer Service:

- Waiter at Strada Restaurant (Sevenoaks), 2011;
- Sales Advisor at Burton Menswear (Ipswich), 2008-2010.

Education

PhD in Computer Science, University of Kent, 2014-2019

- Demonstrated how brain oscillations impact human memory formation. Created novel spiking neural network models;
- Self-taught in cognitive neuroscience and neurobiology.

MSc in Artificial Intelligence, University of Leeds, 2012-2013

- Awarded Distinction & MSc Prize in Computing for best performing MSc student across the Department of Computing;
- Gained proficiency in machine learning methods for classification problems in areas such as neural data, image recognition, text deciphering, and database organisation.

BSc in Computer Science (with Games Technology), Nottingham Trent University (NTU), 2009-2012 (2:1 with Honours)

- Built awareness of several programming languages for systems and software development, and website and games design;
- Developed an Xbox 360-based training software to study the effectiveness of simulation-based learning in Armed Forces Cadets. Helped subjects improve their firing range scores against control group.

Skills

Programming languages:

- Expert level: Matlab
- Working knowledge: R, C#
- Awareness: Python, Javascript, C++

Teaching:

- Leading labs & seminars;
- Mentoring;
- Project supervision.

Relationship management:

- Course representative for Leeds MSc students & Kent research students;
- Social Secretary at NTU Athletics.

Public speaking: delivering presentations at international academic conferences.

Publications

- Parish, G., et al., *The Sync/De-Sync Model: How a synchronised hippocampus and a desynchronised neocortex code memories*, Journal of Neuroscience 38 (14) p3428-3440, 2018;
- Griffiths, B., Parish G., et al., *Directional coupling of slow and fast hippocampal gamma with neocortical alpha/beta oscillations in human episodic memory*, PNAS 116 (43) p21834-21842, 2019;
- Parish, G., et al., *Modelling the replay of dynamic memories from cortical alpha oscillations with the Sync-Fire / deSync Model*, Neuropsychologia 158, 2021;
- Roux, F., Parish, G., et al., *Oscillations support co-firing of neurons in the service of human memory formation*, submitted for publication.

Interests

I enjoy sketching, writing and have been lead singer in some rock bands. I am also a budding gardener, occasional triathlete and enthusiastic football fan, unfortunate enough to support West Ham Utd.

Referees

Simon Hanslmayr
School of Psychology
University of Glasgow
simon.hanslmayr@glasgow.ac.uk

Howard Bowman
School of Computing
University of Kent
h.bowman@kent.ac.uk