Filippo Ferrari

filippoferrari.github.io in frrfpp filippoferrari ferrari.filippo@outlook.com

SUMMARY

I am a final year PhD student in Computational Psychiatry, with two years of experience as a Data Scientist, looking for full-time opportunities from July 2024. I am interested in developing tools and technologies aimed at diagnosing and delivering interventions for mental health conditions, driven by my expertise in anxiety disorders, decision-making and computational models of behaviour.

EDUCATION

PhD Computational Psychiatry

2020 - June 2024

University of Edinburgh, School of Informatics

- Thesis: Computational Modelling of Behavioural Differences in Anxiety Disorders
- Supervisor: Prof. Peggy Seriès
- Designed, developed and run online human behavioural experiments
- Developed and adapted computational models for choice and reaction times data

MSc Artificial Intelligence

2019 - 2020

University of Edinburgh, School of Informatics

Distinction

- Dissertation: A Spiking Neuron Model for Path Integration in the Bee Brain
- Courses: Machine Learning and Pattern Recognition, Computational Cognitive Neuroscience, Deep Learning, Advanced Computer Vision

BSc Artificial Intelligence with Industrial Experience

2015 - 2019

University of Manchester, School of Computer Science

First Class

• Final Year Project: Spiking Neural Network Shape Detector

WORK EXPERIENCE

Data Scientist 2017 - 2019

Innovative Technology Ltd.

Manchester, UK

• Involved in researching, developing, implementing and shipping novel on-device Machine Learning and Computer Vision algorithms for banknote validators

Publications

• Ferrari, F., Alexander, J., Seriès, P. (2023). Risk and loss aversion and attitude to COVID and vaccines in anxious individuals [Preprint]. bioRxiv

Presentations

Poster Presentation | Eleventh Symposium on Biology of Decision Making (SBDM)

Paris 2023

TEACHING EXPERIENCE

University of Edinburgh | Teaching Support Provider

2020 - 2024

- Co-supervision of BSc and MSc projects
- Computational Cognitive Neuroscience (MSc Level): Marker and coursework design
- Foundations of Data Science (BSc Level): Tutor and Marker

SKILLS

Languages: Python, R, MATLAB, C/C++, JavaScript, HTML/CSS, LATEX

Techniques: Bayesian Modelling, Hierarchical Models, Online Human Behavioural Experiments, Reinforcement Learning, Drift Diffusion Models, Prospect Theory, Data Science, Computer Vision

Tools: PyMC, Prolific, JsPsych, Numpy, Pandas, PyTorch, HDDM, hBayesDM