Filippo Ferrari he/they

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Summary

I am a final year PhD student in Computational Psychiatry, with two years of experience as a Data Scientist, interested in developing tools and technologies aimed at helping diagnosing and delivering interventions for mental health disorders. My expertise is in anxiety, decision-making and Bayesian computational models of behaviour.

Education

PhD Computational Psychiatry 2020 - 2024
University of Edinburgh, School of Informatics
- Thesis: *Computational Modelling of Behavioural Differences in Anxiety Disorders*

MSc Artificial Intelligence 2019 - 2020
University of Edinburgh, School of Informatics *Distinction*
- Dissertation: *Insects' Central Complex Path Integration model using Spiking Neurons*
- 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, Reinforcement Learning, Online Human Behavioural Experiments, Drift Diffusion Models, Prospect Theory, Data Science, Computer Vision
Tools: PyMC, Prolific, JsPsych, Numpy, Pandas, PyTorch