Jan-Philipp Fränken

janphilipp.franken@gmail.com janphilippfranken.github.io





3

Proficient: Python, R, JavaScript, HTML, NetLogo Learning: C++

Education

University of Edinburgh, PhD in Psychology.

September 2019-December 2022 (expected)

Bramley Computational Cognitive Science Lab

University College London, MSc in Cognitive and Decision Sciences.

September 2018-August 2019

GPA: 77.8/100, Distinction, Dean's List

o Courses in programming (Python), statistics (R) and fMRI analysis (MATLAB).

Maastricht University, BSc in Psychology.

September 2015-July 2018

GPA: 8.98/10, Distinction, Honours

o Exchange at Universitas Surabaya, Indonesia.

Experience

PhD Researcher, University of Edinburgh.

Septembe 2019-Present

Supervisor: Neil Bramley

- o Applied machine learning tools to model human concept learning resulting in first-author submission (preprint).
- o Used Python and C++ to implement computational models and fit them to experimental data.
- o Leveraged dynamic Bayesian networks to develop account of structure sensitive social inference (toy example).
- o Published first-author conference paper and first-author poster at Cognitive Science Society.
- o Developed interactive multiplayer experiments using React and recruited participants using MTurk (demos).
- o Organised weekly lab meetings and presented research findings in talks at NYU, UC Berkeley, and UCL.

Python & Statistics Tutor, University of Edinburgh.

September 2019-Present

- o Led weekly tutorials and lab sessions across the School of Informatics and Department of Psychology.
- o Courses: Intermediate Python, Computational Cognitive Science in R, Multivariate Statistics in R.
- o Awarded £100 for excellent tutoring performance in 2020/2021.

Researcher, City, University of London.

March 2019-December 2020

Supervisor: Dimitris Pinotsis

o Implemented dynamic causal model of resting-state fMRI using SPM and MATLAB (paper in preparation).

MSc Researcher, University College London.

September 2018-August 2019

Supervisor: David Lagnado

- o Built an agent-based model of echo chamber formation in NetLogo resulting in first-author publication.
- o Developed experimental paradigm and collected data by running interactive experiment on MTurk using JavaScript.

Research Assistant, Maastricht University.

March 2016-June 2018

Supervisor: Henry Otgaar

o Collected and analysed empirical data using a virtual reality-based deception paradigm resulting in co-author publication.

Selected Leadership and Awards

PhD Scholarship, German Academic Scholarship Foundation.

December 2019-Present

o Awarded competitive scholarship by Germany's most prestigious scholarship foundation ($\le 68,800$).

Political Cognition Seminar Series Organiser, University College London.

February 2019-August 2019

o Organised a biweekly seminar series with speakers from Yale, Cambridge, Oxford, LSE, and other top universities.

Lead Course Representative, University College London.

September 2018-August 2019

- o Designed survey to collect data from 70 postgraduate students and presented results to faculty in quarterly meetings.
- o Collaborated with course convenor and developed new assessment format for the module Knowledge, Learning and Inference.

Skills

- o **Machine learning and statistics**: Bayesian models, Monte Carlo methods, causal inference, reinforcement learning, program induction, information theory, regression, clustering, classification, hypothesis testing, model fitting, optimisation.
- o Research skills: Experimental design, model development, data collection, data analysis, data visualisation, report writing.
- o Languages: Native/bilingual proficiency: German, English. Beginner: Bahasa Indonesia.