

Jan-Philipp Fränken

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Proficient: Python, R, MATLAB, 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. September 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 (€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.