Jan-Philipp Fränken

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Proficient: Python, R, NetLogo, JavaScript, HTML 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) and statistics (R).

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

- o Used Python and C++ to build new algorithms of concept learning resulting in first-author submission (preprint here).
- o Developed interactive multiplayer experiments using **React** and recruited participants using **MTurk** (demos *here*).
- o Published first-author conference paper (paper here) and first-author poster at Cognitive Science Society (poster here).
- o Developed novel account of structure sensitive social inference leveraging dynamic Bayesian networks (paper in prep.).
- o Organised weekly lab meetings and presented research findings in talks at NYU, UC Berkeley, and UCL.

Tutor in Computer Science & Statistics, University of Edinburgh.

September 2019-Present

- o Led weekly tutorials helping computer science students with the implementation of computational models in R.
- o Tutored three undergraduate and two postgraduate courses in statistics using R and marked assignments.

Researcher, City, University of London.

March 2019-December 2020

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

MSc Researcher, University College London.

September 2018-August 2019

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

BSc Researcher, PositivePsychology.com.

September 2017-August 2018

- o Collaborated with my BSc supervisor Hugo Alberts (Founder and CPO) and developed a mindfulness training tool.
- o Tested tool with 80 subjects and found significant impact on subjects' life-satisfaction ratings compared to control.

Research Assistant, Maastricht University.

March 2016-June 2018

- o Collected empirical data using a virtual reality-based deception paradigm and analysed results.
- o Presented findings to the university's forensic psychology section and co-authored publication (paper here).

Selected Leadership and Awards

PhD Scholarship, German Academic Scholarship Foundation.

December 2019-Present

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

Tutor Award, University of Edinburgh.

March 2021

o Awarded £100 for excellent tutoring performance in 2020/2021.

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 and Interests

- o **Machine learning and statistics**: Bayesian models, Monte Carlo methods, program induction, causal inference, reinforcement learning, 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.
- o Interests: Kiteboarding, meditation, mixed martial arts, playing guitar.