

# Jan-Philipp Fränken

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janphilippfranken.github.io



Proficient: Python, R, JavaScript, HTML, NetLogo

Learning: C++

## Education

### University of Edinburgh, PhD in Psychology.

Bramley Computational Cognitive Science Lab

September 2019-December 2022 (expected)

### University College London, MSc in Cognitive and Decision Sciences.

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

- o Courses in programming (Python), statistics (R) and fMRI analysis (MATLAB).
- o Student Academic Representative.

September 2018-August 2019

### Maastricht University, BSc in Psychology.

GPA: 8.98/10, Distinction, Honours

- o Exchange at Universitas Surabaya, Indonesia.

September 2015-July 2018

## Experience

### PhD Researcher, University of Edinburgh.

Supervisor: Neil Bramley

September 2019-Present

- 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 model sensitivity to statistical dependencies social learning (*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 Presented research findings in talks at NYU, Brown, UC Berkeley, UCL and MPI for Biological Cybernetics.
- o Organised weekly **reinforcement learning** reading group covering David Silver's lecture series.

### 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 Relevant modules: 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.

Supervisor: Dimitris Pinotsis

March 2019-December 2020

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

### MSc Researcher, University College London.

Supervisor: David Lagnado

September 2018-August 2019

- 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.

Supervisor: Henry Otgaar

March 2016-June 2018

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

## Selected Leadership and Awards

### Co-Founder, Zwango.

January 2022-Present

- o Collaborated with team of three to develop a new double-sided chopping board (Kickstarter campaign to launch in 2022).

### PhD Scholarship, German Academic Scholarship Foundation.

December 2019-Present

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

### ESRC Studentship, Scottish Graduate School of Social Science.

September 2019-December 2019

- o Awarded competitive studentship covering additional training courses (£4327).

### 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.

## 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.