

# Henrik Siljebråt

#brains #games #ledzeppelin

## IN A NUTSHELL

My expertise is behavioural modelling – finding what algorithm best describes human behaviour in a certain task. I used such modelling methods in my PhD thesis to investigate learning and decision making. The same methods can be used to analyse, simulate and predict other systems in society such as energy, economics or public policy.

I have a professional background in IT/DevOps, giving me a broad technical base. Together with an educational background in Cognitive Science, I also have a wide context for how individuals are part of and interact with the environment – systemic thinking.

**WORKING TOGETHER:** My point of view is holistic and cross-disciplinary. I work best in teams with diverse viewpoints, where we help each other understand and grow. I am convinced that is how we produce the best results for ourselves and our potential clients. Let's make the world better, together.

## LATEST EXPERIENCE

### Goldsmiths, University of London, United Kingdom *PhD in Computational Psychology*

SEPTEMBER 2016 - ONGOING (submitted, awaiting viva)

PhD title: On State Representations and Behavioural Modelling Methods in Reinforcement Learning

My work investigates how reinforcement learning (learning from rewards) can be extended with more complex state representations (models of the world), which in turn allows for learning more complex behaviour.

- Implemented neuroscience-based algorithms for describing and simulating learning and decision-making in humans
- Developed new experimental task
- Used and compared multiple methods such as Maximum Likelihood Estimation (MLE), hierarchical Bayesian modelling and Approximate Bayesian Computation
- Fully funded by UKRI/EPSRC

## PREVIOUS EXPERIENCE

### Goldsmiths, University of London, United Kingdom — *Teacher*

MARCH 2021 - OCTOBER 2021

Taught courses on programming in Python, both introductory and intermediate level with data analysis. See <https://bit.ly/3dQoYBL>

## @ME

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henrik.siljebrat.se  
github.com/fohria  
linkedin.com/in/henrik-siljebrat

## LANGUAGES

Swedish (native)  
English (fluent)  
German (beginner)

## SKILLS

### Data Science

Statistical Modelling  
Visualisation  
Bayesian Analysis

### Programming

Python  
MATLAB  
R  
JavaScript

### General

Presentation  
Writing  
Cross-disciplinary communication  
Research

## **Goldsmiths, University of London, United Kingdom — *Teaching assistant***

AUGUST 2019, DECEMBER 2019, FEBRUARY 2020

Worked as teaching assistant in week-long introduction courses to Python, see <https://bit.ly/2I6cO4y>

OCTOBER 2017 - MARCH 2018

Provided student support during weekly two-hour lab sessions for the module Introduction to Programming. Students used p5js, a JavaScript library well suited for creative coding such as visualisations and games.

## **International Motors Nordic AB, Malmö, Sweden — *IT consultant for Head of IT***

MARCH 2016 - AUGUST 2016

Formally employed by Dfind IT (now Randstad), I was a full-time consultant for the Nordic section of the U.K. company International Motors, resellers of cars such as Subaru and Isuzu. My role included doing all parts of IT; from researching new business systems for the CFO, to server configuration and maintenance, programming new software and client support.

## **The Code Bureau, Lund, Sweden — *Sysadmin/DevOps***

SEPTEMBER 2015 - JANUARY 2016

Using the knowledge gained at Atea, I joined a web development start-up part time. This involved setting up Linux-based servers and development tools. More specifically, deploying Node.js web sites with nginx, cross-platform development tools with Docker, setup and maintenance of Gitlab, and server and service monitoring with Prometheus and Grafana.

## **Atea Sverige AB, Malmö, Sweden — *1st Line Support/Technical Analyst***

SEPTEMBER 2011 - JANUARY 2015

Helpdesk support via email and telephone with AD administration and troubleshooting in Windows XP and 7. Also some SAP, LDAP and UGM administration. I mainly supported E.ON, which gave me valuable insight of the IT infrastructure at a multinational company. The workload was sometimes very high, so this work taught me efficiency and stress management.

### **PREVIOUS EDUCATION**

## **Lund University, Sweden — *Master in Cognitive Science***

SEPTEMBER 2013 - SEPTEMBER 2015

Really fun and engaging program that included courses in animal cognition, interaction design, robotics and the philosophy of mind. A full description of the program can be found at <http://www.lucs.lu.se/education/>