

# Aini Putkonen

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## CONTACT INFORMATION

Aini Putkonen  
Helsinki, Finland

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[GitHub Website](#)

## PROFESSIONAL INTERESTS

My research focuses on understanding and modelling human decision-making in interactive systems. I build computational models that are founded on theories of human decision-making developed in cognitive science, economics and psychology. Currently I work on developing simulation models of multi-attribute choice and trading tasks.

## EDUCATION

**PhD, Interactive Systems (in progress)**                              **Feb. 2021 - present**  
Aalto University School of Electrical Engineering, Espoo, Finland  
· Research on user modelling in interactive systems (*Computational Behavior Lab*).  
· Supervisor: prof. Antti Oulasvirta.

**MSc, International Design Business Management**    **Sept. 2019 - Nov. 2020**  
Aalto University School of Science, Espoo, Finland  
· Thesis: *Inverse Modelling of Players' Attitudes Towards Risk in Tactical Turn-based Games*.  
· Graduation with honours (GPA 4.8/5).

**BA, Economics & Management**                              **Oct. 2015 - June 2018**  
University of Oxford (Brasenose College), Oxford, UK  
· Subjects including: Behavioural and Experimental Economics, Quantitative Economics, Finance.

## VISITS

**ETH Zürich, Switzerland**                                      **April 2024 - June 2024**  
**University of Birmingham, UK**                                    **Sept. 2022 - Dec. 2022**

## WORK EXPERIENCE

**Research Assistant**    **Jan. 2020 - Jan. 2021**  
Aalto University School of Electrical Engineering, Espoo, Finland

**Visiting Associate**    **June 2020 - July 2020**  
Boston Consulting Group, Helsinki, Finland

**Junior Software Engineer**                                  **July 2018 - Aug. 2019**  
Hogarth Worldwide, London, UK

**Operations Summer Analyst Intern**                          **June 2017 - Aug. 2017**  
JPMorgan Chase Bank, London, UK

## PUBLISHED RESEARCH

- Suyog Chandramouli, Danqing Shi, **Aini Putkonen**, Sebastiaan De Peuter, Shanshan Zhang, Jussi Jokinen, Andrew Howes, and Antti Oulasvirta. (2024) *A Workflow for building Computationally Rational Models of Human Behavior*. *Computational Brain & Behavior*. <https://doi.org/10.1007/s42113-024-00208-6>
- Danqing Shi, Yujun Zhu, Jussi P. P. Jokinen, Aditya Acharya, **Aini Putkonen**, Shumin Zhai, and Antti Oulasvirta (2024) *CRTypist: Simulating Touchscreen Typing Behavior via Computational Rationality*. *CHI '24*. <https://doi.org/10.1145/3613904.3642918>

- Alexander Aushev, **Aini Putkonen**, Gregoire Clarté, Suyog Chandramouli, Luigi Acerbi, Samuel Kaski, and Andrew Howes. (2023) *Online simulator-based experimental design for cognitive model selection*. *Computational Brain & Behavior*. <https://doi.org/10.1007/s42113-023-00180-7>
- Zhi Li, Yu-Jung Ko, **Aini Putkonen**, Shirin Feiz, Vikas Ashok, IV Ramakrishnan, Antti Oulasvirta, and Xiaojun Bi. (2023) *Modeling Touch-based Menu Selection Performance of Blind Users via Reinforcement Learning*. *CHI '23*. <https://doi.org/10.1145/3544548.3580640>
- **Aini Putkonen**, Aurélien Nioche, Markku Laine, Crista Kuuramo, and Antti Oulasvirta. (2023) *Fragmented Visual Attention in Web Browsing: Weibull Analysis of Item Visit Times*. *ECIR '23*. [https://doi.org/10.1007/978-3-031-28238-6\\_5](https://doi.org/10.1007/978-3-031-28238-6_5)
- **Aini Putkonen**, Aurélien Nioche, Ville Tanskanen, Arto Klami, and Antti Oulasvirta. (2022) *How Suitable is Your Naturalistic Dataset for Theory-based User Modeling?* *UMAP '22*. <https://doi.org/10.1145/3503252.3531322>
- Yu-Jung Ko, **Aini Putkonen**, Ali Selman Aydin, Shirin Feiz, Yuheng Wang, Vikas Ashok, IV Ramakrishnan, Antti Oulasvirta, and Xiaojun Bi. (2021) *Modeling Gliding-based Target Selection for Blind Touchscreen Users*. *MobileHCI '21*. <https://doi.org/10.1145/3447526.3472022>
- Ville Tanskanen, Chang Rajani, Homayun Afrabandpey, **Aini Putkonen**, Aurélien Nioche, Arto Klami (2021) *Modeling Risky Choices in Unknown Environments*. *ACML 2021*. <https://proceedings.mlr.press/v157/tanskanen21a.html>

TEACHING  
EXPERIENCE

- ELEC-E7871 - User-centred Design with Generative AI**, Aalto University
- Co-responsible teacher of the course. **Spring 2024**
- ELEC-E7110 - Trends in Communications Engineering Research**, Aalto University
- Giving the lecture *Computational Models of Human Behaviour*. **Fall 2023**
- ELEC-E7851 – Computational User Interface Design**, Aalto University
- Giving the lecture *Modeling workflow* (available [here](#)). **Fall 2021**
- ELEC-E7890 – User Research**, Aalto University
- Giving the lecture *User Modeling* (available [here](#)). **Fall 2021**
  - Acting as the main teaching assistant. **Fall 2020**
- ELEC-D7010 – Engineering for Humans**, Aalto University
- Giving the lectures
    - *Decision-making*. **Spring 2023**
    - *Decision-making and Reasoning*. **Spring 2022**
    - *Heuristics and Biases in Human Decision-Making*. **Spring 2021**

LANGUAGES

- Finnish**, native or bilingual proficiency  
**English**, native or bilingual proficiency  
**French**, limited working proficiency  
**Swedish**, limited working proficiency

INTERESTS

- Yoga, road cycling, running, knitting and crafts.