

SUMMARY

I am a third-year PhD student in **computational cognitive science** and **AI**, researching **social cognition and learning** in humans and artificial agents.

EDUCATION

- **University of Edinburgh** Edinburgh, UK
PhD, Centre for Doctoral Training in Robotics and Autonomous Systems *Sep 2022 – ongoing*
- **Imperial College London** London, UK
MEng Molecular Bioengineering; 1st class honours *Oct 2017 – Jul 2021*

OTHER RESEARCH EXPERIENCE

- **INRIA Flowers Lab** Bordeaux, France
Visiting researcher (mentored by Clément Moulin-Frier) *June 2024 – Sep 2024*
- **UCL Visual Plasticity Lab** London, UK
Research Assistant *Mar 2022 – Sep 2022*

EMPLOYMENT

- **PolyAI** London, UK
Intern → Software engineer (part-time) *June 2020 – June 2021*
- **MedEngine** Berlin, Germany
Intern → Research engineer (part-time) *June 2018 – Oct 2019*

TEACHING

- **Seminar in Cognitive Modelling** University of Edinburgh
Teaching assistant + marker *2023-24, 2024-25*

SELECTED PAPERS

- **Taylor-Davies, M.**, Bramley, N., & Lucas, C.G. *A rational framework for group-based selective social learning* (Open Mind)
- **Taylor-Davies, M.** & Quillien, T. *An information bottleneck view of social stereotype use* (CogSci 2025)
- **Taylor-Davies, M.**, Hamon, G., Boulet, T., & Moulin-Frier, C. *Emergent kin selection of altruistic feeding via non-episodic neuroevolution* (EvoApps 2025)
- McCallum, S., **Taylor-Davies, M.**, Albrecht, S. & Suglia, A. *Is feedback all you need? leveraging natural language feedback in goal-conditioned reinforcement learning* (Goal-Conditioned Reinforcement Learning Workshop, NeurIPS 2023, **selected for spotlight talk**)

INVITED TALKS

- *Learning about and from other agents*, guest lecture in ‘computational cognitive science’ class @ Edinburgh University (November 2024)
- *Social learning and social groups* @ Human Decision-making Lab, Edinburgh University (November 2023)
- *Imitation, preferences and group identity* @ Computational Cognitive Development Lab, Brown University (November 2023)

AWARDS

- Best paper, EvoApps 2025
- Best student paper, EvoStar 2025
- 3rd place, IBM prize for best project, UoE *Machine Learning Practical* course (2023)

REVIEWING

Cognition, CogSci (2023, 2024, 2025)