Tamlin Love

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2023 - Present

2022 - 2023

Johannesburg, South Africa

Barcelona, Spain

RESEARCH INTERESTS

I am a young researcher from South Africa, now working as a PhD student at the Institut de Robotica i Informàtica Industrial (IRI) (under CSIC and UPC) in Barcelona, working on the TRAIL MSCA-DN project. I am passionate about the possibilities for humans and artificial agents to communicate, collaborate and learn from each other. To that end, I am interested in areas where human knowledge can augment an agent's abilities (e.g. human-in-the-loop, interactive RL) and where human-agent collaboration and communication can improve the human experience (e.g. human-robot interaction, social robotics, explainability). More broadly, I am also interested in the ethical, explainable and safe applications of these technologies.

EDUCATION

Universitat Politècnica de Catalunya	Barcelona, Spain
PhD in Automatic Control, Robotics and Computer Vision	2023 – Present
University of the Witwatersrand	Johannesburg, South Africa
Master of Science in Computer Science (with distinction)	2020 – 2021
University of the Witwatersrand	Johannesburg, South Africa
Bachelor of Science Honours in Computer Science (with distinction)	2019
University of the Witwatersrand	Johannesburg, South Africa
Bachelor of Science in Computer Science (with distinction)	2016 – 2018
St John's College	Johannesburg, South Africa
Matric (8 distinctions)	2015

Member of the <u>Perception and Manipulation</u> group at the <u>Institut de Robòtica i Informàtica Industrial</u> from 2023 - present. Member of the <u>Robotics</u>, <u>Autonomous Intelligence and Learning</u> (RAIL) from 2020 - 2023.

PUBLICATIONS

Towards Explainable Proactive Robot Interactions for Groups of People in Unstructured Environments	2024
Tamlin Love, Antonio Andriella, Guillem Alenyà	
Late Breaking Report @ 2024 ACM/IEEE International Conference on Human-Robot Interaction	
Who should I trust? Cautiously learning with unreliable experts	202
Tamlin Love, Ritesh Ajoodha, Benjamin Rosman	
Neural Computing and Applications	
Masters Thesis	
Featured at <u>RLDM 2022</u> and <u>HARL Workshop @ ICDL 2021</u>	
Building Undirected Influence Ontologies Using Pairwise Similarity Functions	2020
Tamlin Love, Ritesh Ajoodha	
International SAUPEC/RobMech/PRASA Conference	
Honours Research Project	

WORK EXPERIENCE

Researcher

Institut de Robòtica i Informàtica Industrial

- Working on the *TRAIL: TRAnsparent InterpretabLe robots* project (project code: HORIZON-MSCA-DN-101072488), a Marie Skłodowska-Curie Doctoral Network project funded by the European Union.
- Involves research on explainability, causality, human-robot interaction, and robot perception.
- Includes extensive use of Python and ROS.

Sessional Lecturer

University of the Witwatersrand

• Managed and taught the 3rd year Software Design courses and co-taught the 1st year Basic Computer Organisation course for the Computer Science undergraduate degree

· Set, oversaw and marked practical and theoretical assessments for the above courses

Backend Developer

BodyBack

2021 – 2022 Johannesburg,South Africa

• Created and maintained the REST backend framework for the BodyBack mobile application

Tutor

University of the Witwatersrand

2018 – 2021 Johannesburg,South Africa

• Tutored a number of computer science and applied mathematics courses for undergraduate and honours students

PROGRAMMING EXPERIENCE

Languages : Python, Java, C, C++, Matlab

I have experience working with robots (ARI by Pal Robotics, TurtleBot, Kuri by Mayfield Robotics, and RealAnt by OTE) and with the robotics operating system (ROS).

OTHER EXPERIENCE

Organisation

- "Robot Learning for Africa Workshop" at the Deep Learning Indaba in Ghana, 2023 (Website)
- "From Specialists to Generalists: The World of Generalised RL Agents" workshop at the Deep Learning Indaba in Tunisia, 2022 (Website)

Workshops and Summer Schools

- EASE Fall School, Bremen, Germany 2023
- Deep Learning Indaba, Tunis, Tunisia 2022
- HARL Workshop @ ICDL 2021

Reviewing

HARL Workshop @ ICRA 2024; AAMAS 2024; UniReps Workshop @ Neurlps 2023; ICSR 2023; ICRA 2023; NeurIPS 2022

Languages

- English (home language)
- Italian (conversational)
- Spanish (conversational)

ACADEMIC AWARDS AND SCHOLARSHIPS

2022

Poster award at the Deep Learning Indaba 2022

2021

Post-graduate merit award scholarship

2020

Post-graduate merit award scholarship

2019

Post-graduate merit award scholarship Dean's list

2018

Dean's list

Liberty Life Gold Medal for outstanding performance in Computer Science Prize for Top Student in Computational & Applied Mathematics Herbert Le May Prize for the best 3rd year science student majoring in Applied Mathematics Placed 2nd in the SAMMC competition for mathematical modelling First class certificates for 4 courses, merit certificate for 1 course

2017

Dean's list Psybergate Computer Science prize First class certificates for 3 courses, merit certificates for 6 courses

2016

Dean's list