Delara Forghani

in | ⦾ Website | ✉ delara.forghani@uwaterloo.ca

ABOUT

I am a PhD student in the Expressive Input & Interaction (Exii) group in the HCI Lab at the Cheriton School of Computer Science. I am interested in interaction techniques and input methods, particularly in building interactive systems that provide instructions on dexterity tasks using 2D interfaces.

EDUCATION

2024 – 2028	PhD in Computer Science at **University of Waterloo**	(GPA: 97/100)
2021 – 2023	MASc in Electrical and Computer Engineering at **University of Waterloo**	(GPA: 90.60/100)
2016 – 2020	B.Sc in Computer Engineering at **Amirkabir University of Technology**	(GPA: 18.19/20.00)

RESEARCH EXPERIENCE

Graduate Research Assistant, University of Waterloo, HCI lab — Waterloo, Canada
Augmented Reality as an Interface to Tutor Dexterous Tasks — *Sep 2024 –Aug 2028*

> *Supervisor: Prof. Daniel Vogel*

Full-time Research Assistant, University of Waterloo, SIRRL lab — Waterloo, Canada
Emotion recognition and classifying presentations based on audio analysis and body language — *Jan 2024 –Aug 2024*

> *Supervisors: Prof. Kerstin Dautenhahn – Prof. Chrystopher Nehaniv*

Graduate Research Assistant, at the University of Waterloo, SIRRL lab — Waterloo, Canada
System Development and Evaluation of a Social Robot as a Public Speaking Rehearsal Coach — *Sept 2021 –Dec 2023*

Human-Robot Interaction
Experimental Design and User Research
Applied Machine Learning
Statistical Data Analysis
Presentation Skills

> *Supervisors: Prof. Kerstin Dautenhahn – Prof. Chrystopher Nehaniv*

Undergraduate Research Assistant — Tehran, New York (Remote)
Martinez-Conde Laboratory (Remote), and IPM Brain Engineering Center — *Sept 2019 –2021*

Human Vision and Gaze Analysis
Working with eye-tracking devices
Visual Attention

> *Supervisors: Dr. Susana Martinez-Conde – Dr. Reza Lashgari*

Undergraduate Research Intern, Cognitive Robotics Lab — Tehran, Iran
Amirkabir University of Technology — *Oct 2017- May 2018*

Rescue Simulation League, RoboCup IranOpen 2018 Competition (Team SOS VR)
Simurosot - RoboChallenge League, FIRA RoboWorld Cup 2018 Competition (Team MCS)
Map Exploration, Obstacle Avoidance, and Motion Planning using ROS, Gazebo, RViz

> *Supervisor: Dr. Saeed Shiry Ghidary*

PUBLICATIONS

Journal Articles:

Delara Forghani*, Moojan Ghafurian, Samira Rasouli, Chrystopher L. Nehaniv, and Kerstin Dautenhahn
System Development and Evaluation of a Social Robot as a Public Speaking Rehearsal Coach
International Journal of Social Robotics, Accepted in September 2025

Delara Forghani*, Moojan Ghafurian, Samira Rasouli, Chrystopher L. Nehaniv, and Kerstin Dautenhahn
Evaluating People's Perceptions of an Agent as a Public Speaking Coach
Paladyn, Journal of Robotics, Intelligent Agents, and Artificial Intelligence, Accepted in August 2024

Conferences Proceedings:

Delara Forghani*, Moojan Ghafurian, Samira Rasouli, Chrystopher L. Nehaniv, and Kerstin Dautenhahn
What Do People Think of Social Robots and Voice Agents as Public Speaking Coaches?
The 32nd IEEE International Conference on Robot and Human Interactive Communication, IEEE RO-MAN 2023

Michele Boldo, **Delara Forghani***, Nicola Bombieri, Kerstin Dautenhahn, Chrystopher L Nehaniv
A Deep Learning-Based Emotion Recognition Pipeline for Public Speaking Anxiety Detection in Social Robotics
The 34th IEEE International Conference on Robot and Human Interactive Communication, IEEE RO-MAN 2025

PAPER REVIEWER

Assigned Reviewer
Interaction Studies — Social Behaviour and Communication in Biological and Artificial Systems

HONORS AND AWARDS

Canada Graduate Scholarship — Doctoral (CGS-D) Program ($120000)	
Issued by Natural Sciences and Engineering Research Council of Canada (NSERC)	May 2025
University of Waterloo	
Ontario Graduate Scholarship ($15000) (declined)	May 2025
University of Waterloo	
President's Graduate Scholarship (PGS) ($10000)	May 2025
University of Waterloo	
Go-Bell Scholarship ($24000)	
Awarded to awarded to the top applicants on the basis of scholastic excellence and research potential	Sep 2024
University of Waterloo	
Provost Doctoral Entrance Award for Women ($5000)	
Awarded to outstanding female PhD students on a competitive basis	Sep 2024
University of Waterloo	
International Master's Award of Excellence (IMAE) ($12500)	
Based on academic excellence	Sep 2021
University of Waterloo	
2nd Place - Generative AI Challenge ($500)	May 2023
Waterloo AI Institute, Velocity Health at the University of Waterloo (Team "eurikai!")	
1st Place - RoboCup IranOpen 2018	April 2018
Team SOS VR, Rescue Simulation Virtual Robot League, Tehran, Iran	
3rd Place - FIRA RoboWorld Cup 2018	August 2018
Team MCS, Simurosot - RoboChallenge, Taichung, Taiwan	
Ranked top 0.2% - National University Entrance Exam of Mathematical and Technical Sciences	2016

TEACHING ASSISTANTSHIP

CS 349 - User Interfaces	*Sept 2025 –Dec 2025*
CS 349 - User Interfaces	*May 2025 –Aug 2025*
CS 106 - Introduction to Computer Programming 2	*Jan 2025 –April 2025*
CS 349 - User Interfaces	*Sept 2024 –Dec 2024*
ECE 606 - Algorithm Design and Analysis	*Sept 2022 –Dec 2022*
ECE 750 - Special Topics in Computer Software (Social Robotics)	*Jan 2023 –Apr 2023*
ECE 606 - Algorithm Design and Analysis	*Sept 2023 –Dec 2023*

Skills

Devices	Meta Quest3, Meta Quest Pro, Tobii
Development Platforms	Unity, Gazebo, Webots, Rviz, Choregraphe
Programming skills	Python, C#, Java, C/C++, TypeScript/Javascript, HTML, CSS
Data Analysis	Python, R, Matlab
Database Systems	MySQL, MongoDB
Frameworks	PyTorch, Tensorflow, ROS, Laravel
Libraries	Meta XR Interaction, Numpy, Keras, Pandas, Scikit-learn, NLTK, Matplotlib, Seaborn, OpenCV
TypeSetting	LaTeX, Microsoft Word
Operating Systems	macOS, Linux, Windows