### Dr. Wafa JOHAL ARC DECRA Fellow Senior Lecturer, University of Melbourne

School of Computer Science and Information Systems, FEIT, University of Melbourne, Victoria, Australia Adjunct Senior Lecturer at the University of New South Wales, Sydney

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#### ACADEMIC EMPLOYMENT

 October 2021	Senior Lecturer (Assistant Professor), UNIVERSITY OF MELBOURNE, Australia School of Computing and Information System			
000000. 2022	Lecturing Artificial Intelligence COMP300024 - 3y B.S.			
	Human-Robot Interaction Robots Learning Human-Al2 Tangible Robots Cognitive Models for HRI			
	Multi-Modal Interaction			
August 2019	Lecturer (Assistant Professor), University оғ New South Wales, Sydney, Australia			
October 2021	School of Computer Science and Engineering			
	Human-Robot Interaction Robots in Education Tangible Robots Cognitive Models for HRI Multi-Modal Interaction			
August 2019	Postdoctoral Scientist for NCCR Robotics, EPFL, Switzerland			
October 2015	Computer Human Interaction for Learning and Instruction Lab (Pr. Pierre Dillenbourg),			
	Mobile Robots Group - LSRO (Pr. Francesco Mondada)			
	Human-Robot Interaction Robots in Education Tangible Robots Cognitive Models for HRI Multi-Modal Interaction			

# **EDUCATION**

Ph.D in Applied Mathematics and Computer Sciences June 2016

University of Grenoble Alps, Laboratory of Informatics of Grenoble - MAGMA Team France

M.S., Computer Sciences: Graphics, Vision & Robotics June 2012

University Joseph Fourier, Grenoble, France

B.S. B.A. Mathematics and Informatics applied to Cognitive Sciences Pierre-Mendès France University, June 2010 Grenoble, France Exchange Student for one year in Washington College, MA (U.S.A.), August 2009 - May 2010

#### SELECTED RESEARCH PROJECTS

#### **HUMAN-CENTERED ROBOT LEARNING**

2021 - 2024

Proposal author, Lead CI

This project is funded by the ARC. The goal of the project is to investigate novel interaction methods to allow novices to teach robots basic tasks for at home deployment.

440k AUD 3 Years Project ARC DECRA

**ANIMATAS** FEB. 2018 - 2022

Proposal co-author, International Partner The Animatas project, is a EU MSCA ITN ETN that aims to explore the use of virtual agents in educational context.

CHILI EPFL 759k CHF 3 Years Project 3 PhD Students

#### **IRECHECK**

DEC 2019 - 2022

Proposal co-author, International Partner

The IReCheck project, is funded by the Swiss NSF and the French ANR. The goal of the project is to investigate social and task adaptation in a Learning by Teaching task with Typically Developed children and children with Neuro-Developmental Disorders.

CHILI EPFL 490k CHF 3 Years Project

CELLULO 2015 - 2019

Project manager, Proposal co-author

The Cellulo project, funded by the NCCR Robotics (Swiss NSF), aims to design and propose new use of tangible swarm robots in education.

CHILI/MOBOTS EPFL 1Mo CHF 4 Years 2 PhD + 1 Postdoc

# CURRENT SUPERVISION OF JUNIOR RESEARCHERS

Yan Zhang*	PhD, CIS UniMelb,	Implicit Behaviours for Human-Robot Collaboration	Dec. 2023 -
Ramtin Seyed Tabatabei*	PhD, CIS UniMelb,	Joint Attention for Assistive Social Robots	Dec. 2023 -
Muhammad Bilal*	PhD, CIS UniMelb,	Training the Trainer in Robots Learning from Demonstrations	Apr. 2023 -
Sarah Schombs*	PhD, CIS UniMelb,	Data Visualisation for Human-Robot Interaction	Mar. 2023 -
Ulan Kelesbekov	PhD, CIS UniMelb,	Designing Multi-Purpose Haptic Controllers for Virtual Reality	Aug. 2022 -
Adam Goldin	PhD, CSE UNSW,	Robot Planning and Reasoning using Projective Consciousness	Apr. 2021 -
Lina Phaijit*	PhD, CSE UNSW,	An AR-based robot training system for novices to teach	Mar. 2021 -

<sup>\*</sup> primary supervisor



#### ACADEMIC DUTIES

<sup>&</sup>gt; Associate Editor IEEE Robotics and Automation Letters (RA-L) - Human-Robot Interaction, 2020 - 2023

- > Associate Editor Frontiers Robotics and Al, on "Robots for Learning" 2020-2021.
- > Associate Editor International Journal of Social Robotics Springer, on "Robots for Learning", June 2018.
- > Sub Area Chair 18th IEEE/ACM International Conference on Human-Robot Interaction (HRI 2022)
- > Program Chair 9<sup>th</sup> ACM International Conference on Human-Agent Interaction (HAI 2021)
- > Program Chair 10<sup>th</sup> ACM International Conference on Human-Agent Interaction (HAI 2022)

#### **Organisation Committee**

- > General Chair for the 20<sup>th</sup> IEEE/ACM International Conference on Human-Robot Interaction HRI 2025)
- > General Chair for the 11<sup>th</sup> ACM International Conference on Human-Agent Interaction (HAI 2023)
- > Publication Chair for the 8<sup>th</sup> ACM International Conference on Human-Agent Interaction (HAI 2020)
- > Publication Chair for the IEEE/ACM International Conference on Human-Robot Interaction (HRI 2021)
- > Doctoral Consortium Chair 10th International Conference on Affective Computing & Intelligent Interaction (ACII 2022)
- > Women in Al co-chair for the 34<sup>th</sup> Australasian Joint Conference on Artificial Intelligence (AJCAI 2021)

#### Review for Funding Agencies or Other Institutions

- o Australian Research Council, Discovery Projects and Discovery Early Career Awards 2022-2023
- o Dutch Research Council (NWO), Reviewer for Research Proposal, March 2020
- o TA-Swiss, Social and Empathetic Robots Expert Panelist at Bern, September 2018
- o ERA.Net RUS PLUS FP7, Robotics Expert Panelist at the S&T Council, October 2017

## > Institutional Responsibilities

> Human-Computer Interaction Group co-Lead, School of CIS, University of Melbourne

(March 2023 - ...)

> Panel Member for the Low Risk Ethics Committee, University of Melbourne

(June 2022 - July 2023)

> Member of the Head of School Advisory Committee at CSE UNSW

(Nov 2020 - April 2021) (May 2020 - Apr 2021)

Early Career Academic Representative at the Faculty of Engineering Board Meeting, UNSW
 School of CSE's Early Career Academic Representative and Co-Chair at Eng. ECAN, UNSW

(Nov 2019 - Oct 2021)

> Al-Seminar Series, @UNSW, fortnightly talks around AI research in a broad sense.

(Mar 2020 - Jul 2021)

## SELECTION OF INVITED TALKS

- > Human-Robot Interaction for Co-Learning, Canva, Sydney Asutralia, September 2023
- > Robots for co-learning. Monash University, Victoria, Australia, June 2022.
- > Robots for learning but not robotics. Australasian Conference on Robotics and Automation (ACRA 2021), December 2021.
- > Robots for Learning. Tsinghua University, China, November 2021, November 2023
- > Assistive Human-Robot Interaction: From Education to Re-Education. ETH Zurich, Switzerland Dec. 2018.
- > Tangible Human-Robot Interaction: From Learning to Re-Learning, BioX Lab Stanford, Palo Alto, CA, USA. Nov. 2018.
- > The Classroom of Tomorrow Swarm Robots in Education, Swissnex Boston, USA, April 2016.
- > Non-verbal Communication in Human Robot Interaction, MIT Media Lab, Personal Robotics Group, April 2016.
- > Engagement & adaptation: How human-robot interaction can help in everyday life, Naver Labs Europe, December 2016.

# **P** AWARDS

- 2023 Women in Al Award Education in APAC Region.
- 2022 Southern Cross Visiting Fellowships CIS University of Melbourne.
- 2021 GROW Award UNSW Faculty of Engineering 2021 20kAUD Early Career Research Award.
- 2020 UNSW Faculty of Engineering 2020 Award for the category Equity, Diversity and Inclusion.
- 2020 Best Demo Award for our paper CoWriting Kazakh Learning a New Script with a Robot Demonstration.
- 2019 Best Reviewer Award for the 27th International Conference on Computers in Education.
- 2018 Best Paper Award: Honorable Mention. When Deictic Gestures in a Robot Can Harm Child-Robot Collaboration. ACM Interaction Design and Children Conference (IDC 2018), Trondheim, Norway.
- 2017 Best Paper Award: ACM Human-robot Interaction Conference (HRI), Vienna, Austria.
- 2015 Winner of the Social Touch Challenge at International Conference on Multimodal Interaction (ICMI). Nov. 2015.
- 2015 Best Paper Award: Honorable Mention, ACM Human-robot Interaction Conference 2015 (HRI), Portland, USA.
- 2015 HRI Pioneers: International Conference on Human Robot Interaction 2015 (HRI), Portland, USA.

# Y SIGNIFICANT CAREER BREAKS

Feb. 2017 - Oct 2017. Maternity leave after the birth of my son, Lausanne, Switzerland.

May. 2021 - September 2021. Maternity leave after the birth of my daughter, Sydney, Australia.