

Alireza M. Kamelabad

PhD Candidate – Human-Robot Interaction & Conversational AI

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Education

Ph.D. in Computer Science Stockholm, Sweden
KTH Royal Institute of Technology 2021 – present

- Thesis: Robot-Assisted Language Learning in the Digital Age (working title)
- Supervisors: Prof. Gabriel Skantze, Prof. Olov Engwall
- Began as Early Stage Researcher in [e-LADDA](#) (MSCA ITN, EU Horizon 2020) – an EU-wide doctoral network spanning universities and companies researching child-robot interaction for language learning
- Expected completion: December 2026
- Member of the doctoral chapter of the student union (Dr.THS)

M.Sc. in Cognitive Science (Language and Multimodal Interaction) Rovereto, Italy
University of Trento – CIMeC (Center for Mind/Brain Sciences) 2018 – 2020

- Thesis: Computational Models of Lexical Acquisition – Predicting the Age of Acquisition of Different Grammatical Classes
- Supervisors: Dr. Aurélie Herbelot, Dr. Afra Alishahi

M.A. in Human-Computer Interaction Trento, Italy
University of Trento 2017 – 2018

B.Sc. in Computer Science Tehran & Yazd, Iran
Shahid Beheshti University & Yazd University 2011 – 2017

- Thesis: Systems and Methods of Multi-threading in Android Operating System (Supervisor: Dr. Mahmoud Fazlali)
- President of the Students' Computer Science Scientific Association (2012 – 2014)

Experience

Doctoral Researcher, KTH Royal Institute of Technology – Stockholm, Sweden 2021 – present

- Wrote and won a competitive grant of 2,000,000 SEK (Digital Futures) to build a human-AI interaction prototype platform for Swedish-language learning in SFI schools; PI Prof. Gabriel Skantze, Co-PI Dr. Ali Reza Majlesi
- Leading a two-year project applying conversational AI to support adult migrant learners of Swedish
- Continues the [e-LADDA](#) (MSCA ITN, EU Horizon 2020) doctoral research line brought to KTH after the Furhat Robotics secondment
- Supervised 8 master's and 3 bachelor's thesis students across KTH, University of Trento, and University of Freiburg (see Supervision)
- Instructor/TA for Language Engineering (DD2417) and Multimodal Interaction and Interfaces (DT2140) (see Teaching)
- Representative, EECS PhD Council (2022 – 2024); Doctoral representative, TMH Computer Science Doctoral Program Council (2022 – 2024)
- Webmaster, TMH division website (kth.se/is/tmh) – since 2023

Associate Researcher, Furhat Robotics – Stockholm, Sweden

Nov 2020 – Apr 2021

- Research on multimodal language learning as Early Stage Researcher within the [e-LADDA](#) (MSCA ITN) project

Research Assistant / Intern, Tilburg University – Tilburg, Netherlands

Oct 2019 – Aug 2020

- Research assistant in Dr. Afra Alishahi and Dr. Grzegorz Chrupala's Computational Linguistics group, studying computational models of child language acquisition
- Modeled word learning with an MLP neural network in an active-learning, two-agent (learner/oracle) conversational setting, showing that curiosity – formalized as subjective novelty and learning progress – improves word-learning outcomes from visual input
- Resulting collaboration published as "Active Word Learning through Self-supervision" at the 42nd Annual Meeting of the Cognitive Science Society (CogSci 2020)

Teaching

Instructor – Language Engineering (DD2417), KTH: Spring 2023

Instructor – Multimodal Interaction and Interfaces (DT2140), KTH: Fall 2021, 2022

Teaching Assistant – Programming with Python, Tilburg University: 2019 – 2020

Instructor – Digital Design, Shahid Beheshti University: Spring 2014, 2015

Teaching Assistant – Computer Architecture, Shahid Beheshti University: Fall 2016

Supervision

Rantao Dong – M.Sc. (KTH): The Effects of Coherent Storytelling on Vocabulary Learning Using Generative AI Conversation Practice (2026)

Julia Wang – M.Sc. (KTH): Designing a Personalized Robot-Human Interactive Language Learning Conversation Practice System (2025)

Elin Inoue – M.Sc. (KTH): Comparing Bilingual and Monolingual Robots in Swedish Conversation Practice (2024)

Elin Saks – M.Sc. (KTH): Conversational Vocabulary Practice Using Generation Techniques in Large Language Models (2024)

Nada Boukhriss – M.Sc. (KTH): Automated Journalism Using Large Language Models (2024)

Beatrice Turano – M.Sc. (University of Trento): Learning Language with Chatbots in the Era of Large Language Models: A Pilot Study (2023)

Mikael Törnwall – M.Sc. (KTH): Contextual Short-Term Memory for LLM-Based Chatbot (2023)

Gustav Engelmann – Bachelor's Thesis (University of Freiburg): 2023

Erik Lekman & Antonia Drevenlid – Bachelor's Thesis (KTH): 2022 – 2023

Mattias Lundin – M.Sc. (KTH): Use of LLMs in Language Learning (2022)

Publications

When Practice Matters, Collective Learning Has a Price: How – and What – Practice Mediates the Effectiveness of Unscripted Robot-Assisted Vocabulary Learning

Kamelabad, Alireza M., Jaeger, T. Florian, Näslund, Alexander, Skantze, Gabriel
(System (manuscript in preparation))

Personalized Language Learning with an LLM Chatbot: Effects of Immediate vs. Delayed Corrective Feedback

Feb 2026

Kamelabad, Alireza M., Turano, Beatrice, Lundin, Mattias, Skantze, Gabriel
[10.3389/feduc.2026.1703664](#) (Frontiers in Education, 11)

Comparing Monolingual and Bilingual Social Robots as Conversational Practice Companions in Language Learning Mar 2025
Kamelabad, Alireza M., Inoue, Elin, Skantze, Gabriel
[10.1109/HRI61500.2025.10973901](https://doi.org/10.1109/HRI61500.2025.10973901) (ACM/IEEE International Conference on Human-Robot Interaction (HRI '25))

The Question Is Not Whether; It Is How! Mar 2024
Kamelabad, Alireza M.
[10.1145/3610978.3638377](https://doi.org/10.1145/3610978.3638377) (Companion of the ACM/IEEE International Conference on Human-Robot Interaction (HRI '24))

Conformity and Trust in Multi-party vs. Individual Human-Robot Interaction Jan 2024
Kamelabad, Alireza M., Engwall, Olov, Skantze, Gabriel
[10.1145/3652988.3673954](https://doi.org/10.1145/3652988.3673954) (ACM International Conference on Intelligent Virtual Agents (IVA '24))

I Learn Better Alone! Collaborative and Individual Word Learning With a Child and Adult Robot Mar 2023
Kamelabad, Alireza M., Skantze, Gabriel
[10.1145/3568162.3577004](https://doi.org/10.1145/3568162.3577004) (ACM/IEEE International Conference on Human-Robot Interaction (HRI '23))

Active Word Learning through Self-supervision July 2020
Gelderloos, Lieke, Kamelabad, Alireza M., Alishahi, Afra
(Proceedings of the 42nd Annual Meeting of the Cognitive Science Society (CogSci 2020))

Grants and Awards

Digital Futures Demonstrator Project Grant 2024 – 2026
2,000,000 SEK · Digital Futures

- Two years of research on learning Swedish as a second language using AI and social robots, targeting immigrants and refugees with limited access to resources. PI Prof. Gabriel Skantze, Co-PI Dr. Ali Reza Majlesi

Sustainability Award Jan 2025
ACM/IEEE International Conference on Human-Robot Interaction (HRI '25)

SIGAI Student Travel Grant Jan 2024
£1,100 · ACM Special Interest Group on Artificial Intelligence

- For attending and presenting at the 24th ACM International Conference on Intelligent Virtual Agents

Master's Programme Merit-Based Full Scholarship 2018 – 2020
€25,760 · University of Trento

- For M.Sc. in Cognitive Science – monthly stipend, tuition fee waiver, and accommodation

Erasmus+ Traineeship Scholarship 2019 – 2020
€4,800 · European Union

- Internship at Tilburg University, monthly stipend

Thesis Research Abroad Scholarship 2020
€900 · University of Trento

- For M.Sc. thesis research at Tilburg University, monthly stipend

Master's Programme Merit-Based Scholarship

2017 – 2018

€15,360 · University of Trento

- For M.A. in Human-Computer Interaction – tuition fee waiver and accommodation

Talks

Oral Paper Presentation: ACM/IEEE International Conference on Human-Robot Interaction (HRI '25)

HRI Pioneers – Workshop Presentation: HRI Pioneers (2024 cohort), presented at HRI '25

HRI Pioneers – Poster Presentation: HRI Pioneers (2024 cohort), presented at HRI '25

Oral Paper Presentation: ACM International Conference on Intelligent Virtual Agents (IVA '24)

Doctoral Consortium – Poster Presentation: ACM International Conference on Intelligent Virtual Agents (IVA '24)

Paper Presentation: "The Impacts of Robot's Perceived Age and Number of Learners on Language Learning Outcomes and Robot's Social Role Perception" – e-LADDA Closing Conference / ELN Pre-Summit Event, Porto, Portugal (2023)

Poster Presentation: 4th Summer School on Social Human-Robot Interaction, Warsaw, Poland (2023)

Oral Paper Presentation: ACM/IEEE International Conference on Human-Robot Interaction (HRI '23)

Professional Development

MSCA Secondment – University of Göttingen, with Prof. Nivedita Mani: Training in generalized linear mixed models (GLMMs) and linear models for statistics (19 Apr – 30 May 2023)

MSCA Secondment – University of Seville, with Prof. David Saldaña: Training in experimental design (19 Apr – 30 May 2023)

e-LADDA Training Event – Language and Literacy Development in the Digital Age, University of Göttingen: Sessions with Eliane Segers, Natalia Kucirkova, Sascha Schroeder, Kate Cain, Elisa Rubegni (7–9 Dec 2022)

e-LADDA Workshop 3 – Educational Design in Digital Technology, NTNU: Sessions on interaction design for children, AI in education, and gender in computer science (31 Aug – 2 Sep 2022)

e-LADDA Workshop 2 – Advanced Methods for the Study of Language and Literacy: The Cognitive Neuroscience Toolkit, University of East Anglia: Hands-on training in fNIRS, TMS, fMRI, and EEG methods (13–15 Jun 2022)

EMLAR (Experimental Methods in Language Acquisition Research) 2020 – Utrecht Institute of Linguistics: Tutorials: ERP, Ethics and Privacy, Automatic Speech Recognition, Statistics with R, CHILDES

CLIN30 – Computational Linguistics in the Netherlands: Utrecht (2020)

Reviewer

IEEE Robotics and Automation Letters (RA-L)

ACM Transactions on Human-Robot Interaction (THRI)

Advanced Robotics (Taylor & Francis)

Scientific Committee Member / External Reviewer, e-LADDA CON 21 International Conference, Seville (2021)

Membership and Service

IEEE – member since 2023; IEEE Robotics and Automation Society; IEEE Young Professionals

ACM – member since 2022

Cognitive Science Society – member since 2020

Rays for Excellence – Mentor (2021)

Skills

Research: Experimental Design, Data Collection, Statistical Analysis, Machine Learning, Participatory Design, User Research

Programming: Python (Pandas, SciPy), R (dplyr, ggplot2, lme4), Kotlin (FurhatOS)

Tools: Git, LaTeX, Quarto, ELAN

AI Systems: LLMs, Agentic AI, Agent Orchestration, Local Models (Ollama, LM Studio), GPT, Claude, Gemini

Languages: Italian (fluent), English (fluent), Swedish (elementary), Russian (elementary), Persian (native), Azerbaijani (native)