# Alireza M. Kamelabad

 ali.mk

 0000-0001-7890-936X

 horotat

 horotat

 alimk@kth.se

Room 508. Lindstedtsvägen 24 
Division of Speech, Music and Hearing
KTH Royal Institute of Technology
11428, Stockholm, Sweden
+46 (0)8 790 9269 

## Education

**Ph.D. in Computer Science** — 2021 → Now
*KTH Royal Institute of Technology* — *Stockholm, Sweden*

*Supervisor*: Prof. Gabriel Skantze, Olov Engwall

- *Thesis*: "Language Development in the Digital Age"
  - Member of the doctoral chapter of the student union (Dr.THS)

**M.Sc. in Cognitive Science (Language and Multimodal Interaction)** — 2018 → 2020
*University of Trento, (Center for Mind/Brain Sciences)* — *Rovereto, Italy*
- *Thesis*: "Computational Models of Lexical Acquisition: Predicting the Age of Acquisition of Different Grammatical Classes" — *Supervisor*: Dr. Aurelie Herbelot, Dr. Afra Alishahi

**M.A. in Human-computer Interaction** — 2017 → 2018
*University of Trento* — *Trento, Italy*

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

## Skills

 Languages
Native: Persian, Azerbaijani | Fluent: Italian, English | Elementary: Swedish, Russian

 Programming
- Python: Pandas, SciPy, PyTorch, TensorFlow
- Statistics: R
- Other: Kotlin (FurhatOS)

 Tools
- Git/GitLab, Visual Studio Code, LaTeX
- Annotations: ELAN

 Research
- Experimental Design, Data Collection, Data Analysis, Statistics, Machine Learning

 Soft Skills
- Project Management, Teamwork, Research, Presentation, Teaching.

## Work Experience & Teaching

**KTH Royal Institute of Technology** | *Doctoral Researcher* — 2021 → Now
- *Teaching*
  - (DD2417) Language Engineering 7.5 credits – *Instructor*: Dr. Johan Boye — Spring 2023
  - (DT2140) Multimodal Interaction and Interfaces 7.5 credits – *Instructor*: Dr. Gabriel Skantze — Fall 2021, 2022
- *Supervision*
  - Mikael Törnwall, M.Sc. (KTH):"Contextual short-term memory for LLM-based chatbot" — 2023
  - Beatrice Turano, M.Sc. (University of Trento): "Learning Language with Chatbots in the Era of Large Language Models: A Pilot Study" — 2023
  - Bachelor's Thesis Students: Gustav Engelmann (University of Freiburg, 2023), Erik Lekman and Antonia Drevenlid (KTH, 2022 → 2023)
- *Departmental Duties & Commission of Trust*
  - Representative in the school of Electrical Engineering and Computer Science (EECS) PhD Council — 2022 - 2024
  - Doctoral representative of TMH in the Computer Science Doctoral Program Council. — 2022 - 2024

- TMH division's website webmaster (kth.se/is/tmh) — Since 2023

**Furhat Robotics** | *Associate Researcher* — 11.2020 → 04.2021
- Research on Multimodal Language Learning

**Tilburg University** | *Research Assistant/Intern* — 10.2019 → 08.2020
- Research on Computational Modeling of Language Acquisition [Gelderloos et al., 2020]
- Teacher Assistant for "Programming with Python" Course

**Shahid Beheshti University** | *Teacher Assistant* — 2014 → 2016
- **T**eaching
  - Digital Design 8.0 ECTS – Instructors: Dr. Mahmoud Fazlali — Spring 2014, 2015
  - Computer Architechture 8.0 ECTS — Fall 2016

## Societies & Community Services

**Institute of Electrical and Electronics Engineers (IEEE)** | *Member* — 2023
- **R**obotics and **A**utomation **S**ociety
  - Reviewer at "IEEE Robotics and Automation Letters"
- **Y**oung **P**rofessionals

**Association for Computing Machinery (ACM)** | *Member* — 2022
**Cognitive Science Society (CSS)** | *Member* — 2020
**Rays for Excellence** | *Mentor* — 2021

## Publications

Lieke Gelderloos, **Alireza M. Kamelabad**, and Afra Alishahi. Active Word Learning through Self-supervision. In *Proceedings for the 42nd Annual Meeting of the Cognitive Science Society*, pages 1050–1056. Cognitive Science Society, 2020. URL https://cognitivesciencesociety.org/cogsci20/papers/0183/index.html.

**Alireza M. Kamelabad** and Gabriel Skantze. I learn better alone! collaborative and individual word learning with a child and adult robot. In *Proceedings of the 2023 ACM/IEEE International Conference on Human-Robot Interaction*, HRI '23, page 368–377, New York, NY, USA, 2023. Association for Computing Machinery. ISBN 9781450399647. doi: 10.1145/3568162.3577004. URL https://doi.org/10.1145/3568162.3577004.

## Talks, Awards, & Participation

### Talks

**Oral Paper Presentation** | *18th Annual ACM/IEEE International Conference on Human Robot Interaction* — 2023
**M. Kamelabad** and Skantze [2023]

**Poster Presentation** | *4th International Summer School on Human-robot Interaction* — 2023
**M. Kamelabad** and Skantze [2023]

### Grants (221,993 €) & Awards

**Digital Futures Demonstrator Project Grant: Empowering Cultural Integration and Language Learning through Conversational AI (2M SEK ≈ 175,200 €)** | *Digital Futures* — 2024 → 2026

**Master Program Merit-based Full Scholarship (25,760 €)** | *University of Trento* — 2018 → 2020
For M.Sc. in Cognitive Science, Monthly Stipend, Tuition Fee Waiver, and Accommodation

**Thesis Research Abroad Scholarship (900 €)** | *University of Trento* — 04. → 07.2020
For M.Sc. Thesis Research at Tilburg University, Monthly Stipend

**Erasmus+ Traineeship Scholarship (4,800 €)** | *European Union* — 2019 → 2020
Intership at Tilburg University, Monthly Stipend

**Master Program Merit-based Scholarship (15,360 €)** | *University of Trento* — 2017 → 2018
For M.A. in Human-computer Interaction, Tuition Fee Waiver and Accommodation