Elmira Yadollahi

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INTERESTS

Robotics
Mechanics
Psychology
Education
Cognitive Robotics
Artificial Intelligence
Human-Robot Interaction
Affective Computing
Mechanical Modeling

SKILLS

PROGRAMMING:
Expert:
Python • ROS • QML • C#
Java • LaTeX • MATLAB
Professional:
QTQuick • Processing• C • C++
R • Q Basic • Pascal

SOFTWARE:
Expert:
SolidWorks • CATIA • AutoCAD
Professional:
Unity Game Engine • InDesign
• Illustrator • Photoshop

LANGUAGES

Persian	● ● ● ● ●
English	● ● ● ● ●
Korean	● ● ● ○ ○
French	● ● ○ ○ ○
Portuguese	● ○ ○ ○ ○

EXTRACURRICULAR

Traveling and Backpacking
Photography
Drawing and Painting
Plan to open an atelier in Lisbon
Basketball
Extreme Sport
Paragliding (next skydiving)

EDUCATION

PhD in EPFL-IST Joint Doctoral Fellowship in Robotics

ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE (EPFL)
PhD | in Robotics, Control and Intelligent Systems (EDRS)
Expected | Nov 2016 – Nov 2020 | Lausanne, Switzerland
- Under supervision of Prof. Pierre Dillenbourg | GPA: 5.75 out of 6

INSTITUTO SUPERIOR TÉCNICO (IST) | Robotics
PhD | in Information Systems and Computer Engineering (DEIC)
Expected | Nov 2016 – Nov 2020 | Lisbon, Portugal
- Under supervision of Prof. Ana Paiva | GPA: 18 out of 20

KAIST | Mechanical Engineering
MSc | in Acoustics, Noise and Vibration
Graduated | Sept 2012 – Feb 2015 | Daejeon, South Korea
- Overall GPA of 3.75 out of 4.3

SHARIF UNIVERSITY OF TECHNOLOGY | Mechanical Engineering
BSc | in Mechanical Engineering
Graduated | Sept 2007 – Sept 2011 | Tehran, Iran
- Overall GPA: 15.27 out of 20 (140 credits in 8 semesters)

RESEARCH

GAIPS GROUP | Intelligent Agents and Synthetic Characters Group
June 2018 – Present | Lisbon, Portugal
Working with **Prof Ana Paiva** on studying perspective-taking and implementation of a cognitive framework in robots, specifically for educational medium and children.

CHILI LAB | Computer-Human Interaction In Learning Laboratory
Nov 2016 – May 2018 | Lausanne, Switzerland
Working with **Prof Pierre Dillenbourg** and **Dr. Wafa Johal** on **CoReader**, aimed at supporting children's reading practices using a reading comapnion robot for children.

TCL LAB | TeleRobotics and Control Laboratory
Apr 2015 – Feb 2016 | Daejeon, South Korea
Worked with **prof. Kwon Dong Soo**, on human-robot interaction projects.

ACOUSTICS LAB | Noise and Vibration Center (NoViC)
Sept 2012 – Feb 2015 | Daejeon, South Korea

WORK EXPERIENCE

GAIPS GROUP | Part-time lab manager
Feb 2020 – Present | Lisbon, Posrtugal

SM INSTRUMENTS INC | International Marketing Engineer
Feb 2016 – Oct 2016 | Daejeon, South Korea

SCANIA BUS ASSEMBLY PLANT | Intern
June 2010 – Sept 2010 | Semnan, Iran

ESL | English as Second Language Tutor | Part-time
Nov 2014 – Sept 2016 | Daejeon, South Korea

COURSEWORK

GRADUATE

- Affective Computing
- Advanced Topics in Entertainment Systems
- Digital education & learning analytics
- Fundamentals in statistical pattern recognition
- Design of experiments
- Advanced Robotics in Engineering

(Research Asst. & Teaching Asst)

- Social Robotics
- Introduction to Visual Informatics (twice)
- Programming C

UNDERGRADUATE

- Robotic Surgery
- Applied Electronics

SCHOOLS & WORKSHOPS

- **Social Emotions- Theories and Models** Workshop, Cambridge, Sept.2019
- **Serious Games and Casual Free-to-Play Games** Workshop, Lisbon, Jun.2019
- **Norman Foster Foundation Robotics** Atelier, Spain, Nov.2018 (Selected only 10 scholars & funded)
- **SMART School on Computational Social and Behavioral Sciences**, Summer School, France, Sept.2018
- **Methods and Research on Gaze Tracking** Workshop, Portugal, Jul.2018
- **The Near Future of Child-Robot Interaction** Workshop, Norway, Jun.2018
- **Robots for Learning (R4L),** Workshop, Switzerland, Oct.2017
- **Social Human-Robot Interaction** Summer School, Portugal, Sept.2017

PUBLICATIONS

- E. Yadollahi, P. Dillenbourg, A. Paiva **"Changing Perspective as a Learning Mechanism"** accepted to HRI Pioneers Workshop 2020.
- A. Güneysu Özgür, A. Özgür, T. Asselborn, W. Johal, **E. Yadollahi**, B. Bruno, M. Skeweres, P. Dillenbourg **"Iterative Design and Evaluation of a Tangible Robot-Assisted Handwriting Activity for Special Education"** Frontiers in Robotics and AI7 (2020), 29.
- E. Yadollahi, W. Johal, J. Dias, P. Dillenbourg, A. Paiva **"Studying the Effect of Robot Frustration on Children's Change of Perspective"** Workshop of Social emotions in the 8th ACM Conference on Affective Computing and Intelligent Interaction, 2019.
- E. Yadollahi, W. Johal, A. Paiva, P. Dillenbourg, **"When Deictic Gestures in a Robot Can Harm Child-Robot Collaboration,"** In Proceedings of the 17th ACM Conference on Interaction Design and Children, pages 195–206. ACM, 2018.
- T. Asselborn, A. Guneysu, K. Mrini, E. Yadollahi, A. Ozgur, W. Johal, P. Dillenbourg, **"Bringing Leters to Life: Handwriting with Haptic-Enabled Tangible Robots,"** In Proceedings of the 17th ACM Conference on Interaction Design and Children, pages 219–230. ACM, 2018.
- E. Yadollahi, J.G. Ih, **"Acoustic Characterization of Leaks in a Pipeline,"** In proceedings of Inter-Noise 2016
- **"Acoustic Localization of Small Leak Holes in Long Pipeline,"** M.Sc Thesis with Prof. Jeong Guon Ih, Summer 2014
- **"Design of Knee Exoskeleton Mechanism to Assist Walking,"** B.Sc. Thesis with Prof. Hassan Zohoor (18.8/20), Summer 2011

SELECTED PROJECTS

- **"Help Cozmo: A Maze-Like ame to Practice Perspective Taking"** as part of doctoral studies and as a project for Entertainment Systems Course | May 2019 - present
- **"Objects Game: Studying Children's Perspective Taking Behaviour Using Nao Robot"** as part of doctoral studies | May 2018 - present
- **"Studying the Effect of Transparency in Interaction with Robots,"** in collaboration with the the principle investigator of the project, Silvia Tulli | May 2019 - Present
- **"CoReader: Studying Joint Attention in a Reading Activity with a Learner Robot"** as part of doctoral studies | 2017-2018
- **"Studying Learner-robot Interaction: Effect of Joint Attention and Perspective Taking,"** Candidacy Exam Proposal | Passed | October 2017
- **"Bringing Letters to Life: Handwriting with Haptic-Enabled Tangible Robots,"** Digital Learning and Analytics course project | Fall 2017
- **"On robots that interact with people using sound source localization and visual inputs,"** as project in TCL lab, with Prof. Dong Soo Kwon | Spring and Summer 2015

AWARDS AND SCHOLARSHIPS

2018	**CCI Student Best Paper Award**	*Interaction Design and Children Conference, Trondheim, June 2018* Awarded to "When Deictic Gestures in a Robot Can Harm Child-Robot Collaboration"
2018	**Honorable Mention in Best Paper Awards**	*Interaction Design and Children Conference, Trondheim, June 2018* Awarded to "When Deictic Gestures in a Robot Can Harm Child-Robot Collaboration"
2016	**Joint PhD Scholarship**	RBCog-PhD – Robotics, Brain and Cognition PhD program Between EPFL (Switzerland) and IST (Portugal)
2012	**Full Scholarship**	Master of Science program in Mechanical Engineering at KAIST
2007	**Ranked 202nd** (top 0.1%)	National University Admission Examination in Physics and Mathematics