

PERSONAL INFORMATION

Alireza Ahmadi

📍 Sterenburgstraße 45, 53115 Bonn (Germany)

✉ alireza.elecat@uni-bonn.com

🌐 www.AlirezaAhmadi.xyz

💬 [Skype Alireza.Ahmadi_elecat](#)

Nationality Iranian

STUDIES APPLIED FOR

SLAM - Machine Learning - Autonomous Driving - Embedded systems - Design and Building Robotic Platforms

WORK EXPERIENCE

May 2019–Present

R&D Engineer

Escarda Technologies, Bonn (Germany)

- Design and Implementation of Agricultural Mobile Robot Platform.
- Vision-based approaches to navigate robots on the fields autonomously (VisualServoing, etc)

<https://www.escarda.eu/>

Jan 2018–Present

University research assistant

Photogrammetry institute of University of Bonn, Bonn (Germany)

- SLAM and non-Rigid Mapping of Objects
- Mechanical and electrical designing of an agricultural robot.
- Photogrammetry
- Autonomous navigation
- Embedded developer

based on (C++ - CUDA - Python - Matlab)

2012–Sep 2017

Research and development department engineer

Hushmand Afzar Pouya Sanat

Tehran, District 3, No. 8, 3rd floor, Khorshid Building, 2540, Valiasr St, Iran, 1435674173
Tehran (Iran)

pishrobot.com

- R&D Engineer
- App Developer (java - C# - C++)
- Product debugger
- PCB Designer

-Lecturer on Humanoid Robots and ROS in Hushmand Afzar Pouya Sanat Co. and TAARLAB of Tehran University.

Business or sector Professional, scientific and technical activities

Apr 2017–Sep 2017

University research assistant

CastLab of University of Tehran

Responsible for activating the simulation model of Surena ver. 4.0 humanoid robot in SCS (Simulation Construction Set) and building Active model in Gazebo based on URFD and SDF files.

- Oct 2013–2016 **University research assistant**
 University of Amirkabir, Tehran (Iran)
 - Designing Humanoid and @Home Service robot platforms.
 - Embedded Controller and Sensor fusion
 - Robot motion and Walk Generation

EDUCATION AND TRAINING

- 2017–Present **Master's Degree on Geodetic Engineering (Profile of Mobile sensing and Robotics)**
 University of Bonn, Bonn (Germany)
 Thesis Topic: Registration Techniques for non-Rigid Objects
 (Aim of mapping non-rigid objects using TSDF representation and Deformation Graph method in real-time based on RGBD sensors)
- Oct 2011–Feb 2014 **Bachelor's Degree in Engineering of Technology of Electronics**
 Roozbeh Higher educations Institue, Zanjan (Iran)
 Final Project: Design and Implementation of a UAV Auto-pilot
- Feb 2009–Feb 2011 **Associat's on Engineering of Electronics**
 Tabriz Technical State College, Tabriz (Iran)
 Final Project: Design and Implementation of Smart Electricity Meter.

PERSONAL SKILLS

Mother tongue(s) Turkish (Azeri), Persian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
IELTS Overall 6.5 (W:6 - S:6 - R:7 - L:7)					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
 Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

- Honours and awards
- 2016-Third Place, Creativity Exhibition of ICRoM-2016 (International Conference on Robotics and Mechatronics, IEEE).
 - 2015-Third Place, in International Robotic Competition Robocup-2015 Hefei, Humanoid teen-size league, Hefei, China.
 - 2015-Second Place, in International Robotic Competition Robocup-2015 Hefei - the technical challenge of Humanoid teen-size league, Hefei, China.
 - 2015-First Place, the 10th in International Robotic Competition IRAN Open 2015- the technical challenge of Humanoid teen-size league, Tehran, IRAN.
 - 2014-Awarded as The Best Technologist Based on National Elites Foundations Report (Society of prominent -students of the country), (Iran).
 - 2013-Silver Medal, 42nd WorldSkills international Competition, in Mobile Robotics field. WorldSkills 2013 Leipzig, Germany [www.worldskills.org].
 - 2013-Gold Medal (Best of the Nation Award), in 42nd WorldSkills Competition. WorldSkills 2013 Leipzig, Germany.

- 2013-First Place, the 4th in International Robotic Competition AUTcup 2013- Amirkabir university of Tehran (Tehran Polytechnic), @Home robots), Tehran, Iran.
- 2013-First Place, the 4th in International Robotic Competition AUTcup 2013 – Amirkabir university of Tehran (Tehran Polytechnic), Humanoid robots, Tehran, Iran.
- 2012-Awarded Member of National Elites Foundation (Society of prominent students of the country), (Iran).
- 2012-First Place, the 13th in Iran TVTO NationalSkills Competition, Mobile Robotics. Iran Technical & Vocational Training Organization (Iran TVTO), Karaj, Iran.

Publications

- [2019] - Kolbari, H., Ahmadi, A., Bahrami, M. and Janati, F., 2019. AUT Spherical Robot: Dynamic Estimation and Trajectory Control. *International Journal of Robotics, Theory, and Applications*.
- [2019] - Alireza Ahmadi, Lorenzo Nardi, Nived Chebrolu, Cyrill Stachniss "Visual Servoing-based Navigation for Monitoring Row-Crop Fields" Submitted to the IEEE International Conference on Robotics and Automation (ICRA) 2020.
- 2018 - Hamidreza Kolbari, Alireza Ahmadi, Mohsen Bahrami, Farzam Janati.; Impedance Estimation and Motion Control of a Pendulum-Driven Spherical Robot; 5rd RSI International Conference on Robotics and Mechatronics; ICROM 2018, Tehran, Iran.
- 2016 - Mojtaba Karimi, Alireza Ahmadi, Parinaz Kavandi, Saeed Shiry Ghidary. "omnidirectional swarm platform for outreach, research and education" 4th RSI International Conference on Robotics and Mechatronics; ICROM 2016, Tehran, Iran.
- 2015 - Alireza Ahmadi, Mojtaba Karimi, Navid Khazaee Korghond, Edwin Babaians, Saeed Shiry Ghidary.; Top-Down attention control for device communication manager on mobile robot platform; 3rd RSI International Conference on Robotics and Mechatronics; ICROM 2015, Tehran, Iran.
- 2015 -Mojtaba Karimi, Alireza Ahmadi, Navid Khazaee Korghond, Edwin Babaians, Saeed Shiry Ghidary.; ReMoRo mobile robot platform based on distributed I/O modules for research and education purpose; 3rd RSI International Conference on Robotics and Mechatronics; ICROM 2015, Tehran, Iran.
- 2015 -Edwin Babaians, Navid Khazaee Korghond, Alireza Ahmadi, Mojtaba Karimi, Saeed Shiry Ghidary.; Skeleton and Visual Tracking Fusion for Human Following Task of Service Robots; 3rd RSI International Conference on Robotics and Mechatronics; ICROM 2015, Tehran, Iran.
- 2014-Mohsen Falahi, Taher Abbas Shangari, Ameneh Sheikhfafari, Shaghayegh Gharghabi, Alireza - Ahmadi, Saeed Shiry Ghidary.; Adaptive Handshaking between Human and Robots, Using Imitation; 2rd RSI International Conference on Robotics and Mechatronics; ICROM 2014, Tehran, Iran.
- 2012 -Alireza Ahmadi, Programming of 32bit ARM microcontrollers AT91sam7s series with C language, Edition: 2, (Islamic Republic of IRAN), 20 March 2013, ISBN: 978-600-6481-20-3, 2013 (in Persian).

Memberships

- Since 2016 - Member of Photogrammetry and Robotics Group of University of Bonn (<http://www.ipb.uni-bonn.de>)
- Since 2012 - Member of National Elites Foundation.
- 2013 - 2016 - AUT@Home Service Robot Team, Amirkabir University of Tehran (Tehran Polytechnic).
- 2014 - 2015 - AUT-UofM Humanoid Robots Team, Amirkabir University of Tehran (Tehran Polytechnic).
- 2013 - 2016 - Scientific Committee, Jury Committee, Iranian National Skills Competition (Mobile robotics).
- Since 2014 - Member of Iran's Robotics and Mechatronics Society.
- Since 2013 - Member of Worlds High-Skilled students' community (<https://worldskills.org>).
- Since 2012 - Member of Iran's High-Skilled students' community (Organized by National Technical and Vocational Organization).

References

Prof. Dr. Cyrill Stachniss
 Full professor at the University of Bonn and heads the lab for Photogrammetry and Robotics.
 University of Bonn

Photogrammetry, IGG
Nussallee 15
53115 Bonn, Tel: +49 – 228 – 73 – 27 13 (secretary)

Dr. Julio Pastrana
CEO & Co-founder at Escarda Technologies
julio.pastrana@escarda.net

Mr. Mehdi Vafae
Vice chairman, Hushmand Afzar Pouya.Co.Ltd, Tehran, Iran (Pishrobot.com)
vafae.mehdi@gmail.com, Tel: (+98) 21-8865-4299

Dr. Saeed Shiry Ghidary
Assistant Professor, Amirkabir Robotic Research Institute, Amirkabir University of Technology, Tehran,
Iran. shiry@aut.ac.ir, Tel: (+98) 21-6454-2737