



Iman Esfandiyar

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● ABOUT MYSELF

I am a dedicated and personable individual pursuing PhD in robotics from Poznan University of Technology. Since 2012, I have been involved in academic and industrial settings, focusing on computer vision, motion planning and control solutions for autonomous mobile robots using AI and classic approaches. I have participated in several national and EU projects as a researcher, developer, and technical leader, developing software for industrial robots, autonomous buses, agricultural robots, and drone swarms. Passionate about problem-solving, I thrive on new challenges, working independently or in teams, and am committed to proactive and organized project execution.

● EDUCATION & TRAINING

2024 - Current - POLAND

PHD STUDENT- POZNAN UNIVERSITY OF TECHNOLOGY

Field(s) of study: Automation, electronics, electrical engineering and space technologies

2018 - 2020 - POLAND

MASTER'S DEGREE- POZNAN UNIVERSITY OF TECHNOLOGY

Masters Thesis

Algorithmization of lining up manouver for automated articulated bus.

Supervisor: dr hab. Inż. Maciej Michałek Prof. of PUT (maciej.michalek@put.poznan.pl)

Field(s) of study: Automatic Control and Robotics, specialization Smart Aerospace and Autonomous Systems | **Final grade:**

4.29 | **Type of credits:** ECTS | **Number of credits:** 90 | **Thesis:** 5

2011 - 2016 - IRAN

BACHELOR'S DEGREE- AZAD UNIVERSITY DAMAVAND BRANCH

Field(s) of study: Mechanical Engineering, Specialization Mechatronics | **Final grade:** 3.96/5 | **Number of credits:** 150

● WORK EXPERIENCE

15/10/2022 - CURRENT - POZNAN, POLAND

CHIEF SPECIALIST ROBOTICS AND AI SIEĆ BADAWCZA ŁUKASIEWICZ - POZNAŃ INSTITUTE OF TECHNOLOGY

Business or sector Information and communication | **Department:** Artificial Intelligence Development | **Email:** iman.esfandiyar@pit.lukasiewicz.gov.pl

14/10/2021 - CURRENT - POZNAŃ, POLAND

UNIVERSITY RESEARCH AND TEACHING ASSISTANT POZNAŃ UNIVERSITY OF TECHNOLOGY

2021 - 2024 - POZNAN, POLAND

ROBOTIC SOFTWARE DEVELOPMENT LEAD ROGOŹ SP. Z O.O. -A- S.K.A.

Email: i.esfandiyar@rogozpolska.pl

30/09/2019 - 29/06/2021 - POZNAŃ, POLAND

RESEARCH ASSISTANT POZNAŃ UNIVERSITY OF TECHNOLOGY

- Design and develop Advanced driver-assistant system for articulated urban buses.
- Develop Sensor fusion, state estimation planning and control algorithms of autonomous vehicles
- Developing ROS1 and ROS2 packages, Programming C++ in Linux OS

2017 - 2018 - PARDIS, IRAN

HEADS OF WORKSHOP SPADANA CO

- Vending machine production line manager
- Mechanical system design

2011 - 2014 - DAMAVAND, IRAN

RESEARCH TEAM LEADER AZAD UNIVERSITY OF DAMAVAND

- Coordinator and technical manager of DML rescue robot research group
- Design and develop of mechanical systems of various mobile robots
- Establishing modular electronic and embedded systems.
- Establishing robotic communication systems.

● PROJECTS

01/2026 - CURRENT

Modular Robotics Software Platform for Autonomous Agricultural Machinery *Position: Technical manager*

Released by: Sieć Badawcza Łukasiewicz - Poznań Institute of Technology

Project financed under the Internal R&D Program (Subvention 2026)

Project budget: 3 200 000 PLN

2022 - 2025

ICOS Towards a Functional Continuum Operating System *Position: Technical manager, Autonomous farm robotic software developer*

Released by: Sieć Badawcza Łukasiewicz - Poznań Institute of Technology

Funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101070177

Project budget: 300 625 EUR

2025 - 2025

Agriverse - Computer Vision Pipeline Development for Crop and Weed Detection Using Synthetic Data from Digital Twins *Position: Technical manager - Project owner*

Released by: Sieć Badawcza Łukasiewicz - Poznań Institute of Technology

Project financed under the Internal R&D Program (Subvention 2025)

Project budget: 670 000 PLN

2019 - 2021

Advanced driver assistance system for precise manoeuvres of non-articulated and articulated city buses *Position: Research assistant, system developer*

Released by: Poznań University of Technology, Solaris Bus & Coach sp. z o.o.

Project financed under the Regional Science and Research Agendas program by the National Center for Research and Development

POIR 04.01.02-00-0081/17

Co-financed by the European Regional Development Fund: 3 848 181 PLN

2022 - 2025

AgrifoodTEF, Test and Experiment Facilities for the Agri-Food AI Domain *Position: Chief specialist, plant detection and autonomous farm robot development*

Released by: Sieć Badawcza Łukasiewicz - Poznań Institute of Technology

Funding from the European Union's Digital Europe Programme under grant agreement No. 101100622

Project budget: 2 395730 EUR

Development of intelligent swarm technology as reconfigurable drones and for photovoltaic farm inspection and drone shows Position: Chief specialist, Team lead, Development of autonomous drone swarm system

Released by: "ROGOŻ" Sp. z o.o., Polsko-Japońska Akademia Technik Komputerowych

Project financed under the Smart Growth Operational Program by the European Regional Development Fund

POIR.04.01.04-00-0078/20

Project budget: 12 566 671,28

01/01/2023 - 31/12/2023

Development of advanced technology of autonomous drone swarms for digital security of critical infrastructure, ad hoc inspection applications Position: Product manager, Swarm management and monitoring software

Released by: "ROGOŻ" Sp. z o.o., Warsaw University of Technology

POIR.01.01.01-00-0040/22

Project budget: 14 349 134,00 PLN

● PUBLICATIONS

Mapping the Unseen Ground: A Survey on Dense Mapping and Traversability Methods for Agricultural and Forestry Robots

I. Esfandiyar and D. Belter IEEE Access

GNSS-Based Driver Assistance for Charging Electric City Buses: Implementation and Lessons Learned from Field Testing

Remote Sensing | Journal volume: vol. 15 | Journal number: iss. 11.

● CONFERENCES & SEMINARS

2025

Dual-Link Data Resilient Edge-to-cloud Communication Framework for Agricultural Robots Conference proceeding

IoT-AI 2025. The Second International Conference on IoT-AI

Links https://www.thinkmind.org/library/IoTAI/IoTAI_2025/IoTAI_2025_1_60_20046.html

2025

Towards a Functional Continuum Operating System – ICOS MetaOS Conference proceeding

First Global Summit, GIECS 2024, 24-25.09.2024, Brussels, Belgium

Links http://dx.doi.org/10.1007/978-3-031-78572-6_8

28/11/2023 - 29/11/2023 Poznań

Potential of implementing operational meta systems in agriculture using the ICOS project

Links <https://www.rol-eko.com/>