

ARASH SADEGHI AMJADI

♥ St. John's, NL

✉ arash.sadeghi1997@gmail.com

in www.linkedin.com/in/arash-s-amjadi

🔗 <https://github.com/arash-sadeghi>

[Google Scholar](#)

Summary

Highly adaptable programmer with over 8 years of experience in Python, C++, Java, and JavaScript, specializing in software development, AI, robotics, and computer vision. Proven ability to rapidly learn and excel in challenging technology projects demonstrated through experience as a researcher and software developer positions with a track record of developing innovative solutions. Possesses effective communication, collaboration, and time management skills, contributing effectively to diverse teams and projects.

Education

Memorial University of Newfoundland (MUN)

St. John's, NL, Canada

MSc in Computer Science. **Focus:** Artificial Intelligence for music

Jan 2023

Middle East Technical University (METU)

Ankara, Turkey

MSc in Mechanical Engineering (Robotics). **Focus:** Reinforcement Learning, software development.

Sep 2019 - Sep 2021

University of Tabriz

Tabriz, Iran

BSc in Electrical Engineering (Robotics). **Focus:** Software development for Robots

Sep 2015 - Jun 2019

Technical Skills

Software: C/C++, C#, Python, (PyTorch, OpenCV, Pandas, NumPy, Scikit-learn, TensorFlow, Keras, NLTK), Java, JavaScript, Node JS, HTML, CSS, React, Git, Jenkins, linux OS, Azure, Docker, Kubernetes.

Skills: Machine/Deep Learning, AI, Robotics, Software development, Web development. Computer vision/ image and signal processing

Experience

MUN

St. John's, NL

Teacher Assistance

2023

- Provided instructional support as a Teaching Assistant for a range of courses in game development using C++, object-oriented programming in Java, and Artificial Intelligence concepts at Memorial University of Newfoundland (MUN).

GoodAI

Prague, Czech Republic

Web and Robotic Software Developer

2022-2023

- Spearheaded the development of high-impact navigation and coordination software, leveraging **ROS** platform, to seamlessly control drone swarms.
- Designed and implemented a user-friendly ground station control software using **React.js** for efficient drone operations management.
- Implemented object detection and tracking for drone using **Deep Learning** and **Computer Vision**.

Czech Technical University (CTU)

Prague, Czech Republic

Software Developer and Researcher

2021-2022

- Led the development of robust Computer Vision and Deep Learning stacks, enabling precise object detection and tracking in complex environments for the Roboroyale project.
- Instructed and supported students as a teaching assistant for C/C++ programming.

Projects

MUN MSc Thesis: Music Generation with GANs and Large Language Models

Jan 2023 - Feb 2024

- Developed a website for drum accompanying using GAN AI models and transformers to accompany human players.

Published paper: Web developing for SwarmJS

Jun 2023

- Enabling connections of front-end to external simulation engines like Python through Web Sockets in the back-end, enhancing AI capabilities.

METU MSc Thesis: Robot Simulators Development

Sep 2019 - Apr 2021

- Programmed dynamic simulators for robots on Webots, ROS, and Python platforms, enhancing exploration capabilities in the KOVAN lab.