

ARASH SADEGHI AMJADI

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Summary

Highly adaptable programmer with over 8 years of experience in Python, C++, Java, and JavaScript, specializing in software development, AI, robotics. Possesses effective communication, collaboration, and time management skills, contributing effectively to diverse teams and projects. Passionate about contributing to software, AI, and robotic projects.

Education

Memorial University of Newfoundland (MUN)

St. John's, NL, Canada

MSc in Computer Science **Focus:** Generative AI and Large Language Model for real-time music

Jan 2023

Middle East Technical University (METU)

Ankara, Turkey

MSc in Mechanical Engineering **Focus:** Reinforcement Learning, software development

Sep 2019 - Sep 2021

University of Tabriz

Tabriz, Iran

BSc in Electrical Engineering **Focus:** Software development for Robots

Sep 2015 - Jun 2019

Technical Skills

Languages and Technologies: Java, Python, (PyTorch, TensorFlow, NLTK), LLMs (BERT, GPT3, Encoder-Decoder), ReactJS (Material UI), NodeJS, Azure, AWS, Docker, C/C++, C#, JavaScript, HTML, CSS, Git, Jenkins, PostgreSQL, linux OS

Skills: Machine/Deep Learning(Computer Vision, Generative Adversarial Networks, Large Language Models, LSTMs), Data Mining/Processing, Robotics, Software development, Web development

Work Experience

MUN

St. John's, NL

Teacher Assistant

2023

- Supported game dev (C++), Java OOP, & AI courses as a MUN Teaching Assistant.

GoodAI

Prague, Czech Republic

Full Stack Software Developer

2022-2023

- 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.
- Developed ROS node for drone navigation and control. Simulated controller in Gazebo and UE4.

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. Integrate developed model to ROS frame work and used in real robots.
- Developed Deep Learning-based ROS node for Visual Navigation of ground Robots

Projects

Music Generation with GANs and Large Language Models

Jan 2023 - Feb 2024

- Developed an AI model for drum accompanying using Generative AI and Large Language models to accompany human players in real-time.

Web developing for SwarmJS

Jun 2023

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

Robot Simulators Development

Sep 2019 - Apr 2021

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