

Atahan Çaldır

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Green Card holder (Permanent resident of the United States)

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EDUCATION

Özyeğin University

Bachelor of Science, Computer Science

- GPA: 3.81/4.00

Istanbul, Türkiye

September 2018 - February 2023

EXPERIENCE

AST SpaceMobile

Software Engineer

Midland, TX

July 2023 - December 2024

- Developed and implemented the BlueBird LEO satellite constellation's software and electronic tests and the automation processes in the ATE team
 - * Worked on the launch campaign of the BlueBird Block 1 satellites in SpaceX payload processing facility at Cape Canaveral, Florida
 - * Independently developed and deployed 4+ multi-threaded full-stack software for test equipment automation, test design, and satellite mass production tracking, utilized by 200+ users in 5 countries.
 - * Developed desktop software (C#, Python, SQL), web apps (TypeScript, Next.JS), and hardware test scripts (Python) using various tools (Docker, OpenC3 COSMOS)
 - * Installed, maintained, and optimized 40+ test racks in the company headquarters for functional, solar panel, thermal, OTA, and satellite compatibility tests
 - * Collaborated with the company's upper management and international teams for taking long and short term strategic decisions

Özyeğin University

Undergraduate Research Assistant

Istanbul, Türkiye

October 2021 - July 2022

- Worked with Dr. Mehmet Özsoy and Dr. Ata Can Bertay on global cryptocurrency statistics to understand the socio-behavioral tendencies of each country toward altcoins

University of Cambridge

Research Intern

Cambridge, UK

July 2021 - September 2021

- Worked remotely in the AFAR Lab under the supervision of Prof. Hatice Güneş on a human-robot interaction project
 - * Designed a Python-based experiment environment with Robot Operating System (ROS) to use the Pepper Robot with a custom Continual Learning model
 - * Published 2 academic papers (40+ citations)

Özyeğin University Intelligent Systems Lab

Research Intern

Istanbul, Türkiye

February 2021 - June 2021

- Worked with Dr. Reyhan Aydoğan on a human-robot negotiation project in which I was funded by Scientific and Technological Research Council of Türkiye (TUBITAK) with the "TUBITAK STAR Program" grant

Özyeğin University

Undergraduate Research Assistant

Istanbul, Türkiye

May 2020 - January 2021

- Worked with Dr. Mehmet Özsoy on applications of NLP in Economics for correlation analysis of US companies' quarter reports and their stock prices
 - * Used Python for developing custom NLP models with Tensorflow and NLTK frameworks to analyze terabytes of data fetched from SEC's public EDGAR database using a custom web scrapping algorithm

PROJECTS

OzU Rover Team

Technical Team Leader

Istanbul, Türkiye

September 2019 - April 2020

- Led a team of 30 engineers from CS, EEE, ME divisions with agile development techniques to work collaboratively
- Developed the team's 5th generation Mars rover's ("Hope") software and electronic parts of the science module for the University Rover Challenge (URC) 2020 organized by The Mars Society in USA (Qualified for the finals)

Software Engineer

November 2018 - April 2020

- Developed various modules of the team's 4th generation Mars rover prototype, Theia II
- Ranked 13th among 56 teams in European Rover Challenge (ERC) 2019 organized by European Space Agency (ESA) in Poland

PUBLICATIONS

- Axelsson, M., Churamani, N., **Çaldır, A.**, & Gunes, H. (2022). “Participant Perceptions of a Robotic Coach Conducting Positive Psychology Exercises: A Systematic Analysis”. <https://doi.org/10.48550/arXiv.2209.03827>
Paper accepted for publication at ACM Transactions on Human-Robot Interaction journal
- Churamani, N., Axelsson, M., **Çaldır, A.**, & Gunes, H. (2022). “Continual Learning for Affective Robotics: A Proof of Concept for Wellbeing”. <https://doi.org/10.48550/arXiv.2206.11354>
Paper presented at 10th International Conference on Affective Computing and Intelligent Interaction (ACII) 2022
- Gökay, H., Çelik, N., Savaşlı, A., **Çaldır, A.**, Yıldırım, S., & Bebek, O. (2019). “The Comparative Analysis of the Strategies Used in Planetary Rovers’ Autonomous Locomotion”
Paper presented at Türkiye Robotics Conference (ToRK) 2019

HONORS & AWARDS

- Özyeğin University, High Honors List 2019 - 2023
- OBSS, University Specific 1st Prize in CodeMaster Hackathon March 2022
- Yandex, Honor Team Award in MusicHackOzyegin Hackathon among +14 teams July 2020
- Alternatif Bank, 1st Prize in Unobstructed Banking Hackathon among +9 teams March 2020
- Özyeğin University, Undergraduate Placement Exam Entrance Scholarship (100%) 2018

EXTRACURRICULAR ACTIVITIES

- Board Member, OzU Interdisciplinary Thought Club, Özyeğin University 2020 - 2021
- Speaker, Turkish Technology Team Foundation 2019

SKILLS

Languages: Turkish (Native), English (Fluent), German (Beginner)

Programming Languages: Python (+10 years), C/C++, C#, Java, JavaScript/TypeScript, SQL, HTML/CSS

Frameworks: Robot Operating System (ROS), ROS 2, Pandas, Flask, OpenCV, Keras, Tensorflow, PyTorch, Scikit-learn, Selenium, PyQt5, Pytest, FastAPI, asyncio, WPF, WinForms, React, Next.js, React Native

Tools: Git/GitHub, Docker, OpenC3 COSMOS, Webots, Choregraphe, Qt Designer, Firebase, Expo, Google Cloud

Others: Socket programming, GUI programming, Arduino, Raspberry Pi, RESTful APIs, Multithreading, HITL, Communication protocols (UART, SPI, I²C, Modbus, etc.), UNIX/Linux, Web crawling, CI/CD, MVC & MVVM development, Debugging, Jira, NoSQL