Atahan Çaldır

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Green Card holder (Permanent resident of the United States)

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EDUCATION

Özyeğin University   *Istanbul, Türkiye*
Bachelor of Science, Computer Science   September 2018 - February 2023
- GPA: 3.81/4.00

EXPERIENCE

AST SpaceMobile   *Midland, TX*
Software Engineer   July 2023 - December 2024
- Worked on the development and implementation of BlueBird LEO satellite constellation's software and electronic tests and the automation processes in the ATE team. The LEO satellite constellation aims to provide smartphones with a space-based cellular broadband network without the need for external equipment
  * Worked on the launch campaign of the BlueBird Block 1 satellites in SpaceX payload processing facility at Cape Canaveral, Florida
  * Independently developed multi-threaded full-stack software for test equipment automation, test design, and satellite mass production tracking, utilized by hundreds of users across spacecraft test setups in the company's facilities in the USA, Israel, Spain, and India. Leveraged TypeScript for web applications, Python for test scripts, C# for the desktop software suite, and SQL for database management
  * Supported the production and troubleshooting of the unique software and hardware of the satellite components
  * Managed 40+ test racks of the company headquarters at Midland, TX for functional, solar panel, thermal, OTA, and satellite compatibility tests
  * Educated and guided operators to use test racks
  * Collaborated with the company's international teams for the development and implementation of the new test software and hardware versions

Özyeğin University   *Istanbul, Türkiye*
Undergraduate Research Assistant   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   *Cambridge, UK*
Research Intern   July 2021 - September 2021
- Worked remotely in the AFAR Lab under the supervision of Prof. Hatice Güneş on a human-robot interaction project in which ROS (Robot Operating System) is used to develop an experiment environment for Pepper Robot

Özyeğin University Intelligent Systems Lab   *Istanbul, Türkiye*
Research Intern   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   *Istanbul, Türkiye*
Undergraduate Research Assistant   May 2020 - January 2021
- Worked with Dr. Mehmet Özsoy on applications of NLP in Economics

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

Projects

OzU Rover Team   *Istanbul, Türkiye*

Technical Team Leader   September 2019 – April 2020
- Managed CS, EEE, ME division members 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) (Challenge canceled due to COVID-19 pandemic)

Software Engineer   November 2018 – April 2020
- Developed different 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

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, unittest, Pytest, WPF, WinForms, React, Next.js
Tools: Git/GitHub, Docker, OpenC3 COSMOS, Webots, Choregraphe, Qt Designer
Others: Socket programming, GUI programming, Arduino programming, RESTful APIs, Multithreading, HITL, Communication protocols (UART, SPI, I^{2}C, Modbus, etc.), UNIX/Linux, Web crawling, CI/CD, MVC & MVVM development, Debugging, Jira

Soft Skills: Leadership, Agile development, Critical thought, Communication, Teamwork, Scientific documentation