Ozan Akyildiz
Robotics Engineer

⚲ Kadikoy/ Istanbul, Turkey
☐+ 90 552 449 2411
✉ akyildizozan@gmail.com
in ozan-akyildiz
○ oakyildiz

Summary

Robotics Engineer, MSc, with demonstrated experience in system design & lifecycle and open-source development. Designed and maintained robotic systems; implemented computer vision, navigation, mapping, control, and autonomy modules with ROS and OpenCV. Developed web, mobile, and desktop interfaces. Prototyped automotive-grade enclosures and harnesses. Coordinated SW teams and researchers, and tutored K-12 to college-level students. Studied batteries, actuators, and materials. I value having a breadth of knowledge both in and out of my discipline. Looking forward to taking on newer challenges with an ambitious and diverse team of designers and innovators.

Experience

CTO – THE 541N75, Istanbul, Turkey   **Feb 2022 – Present**
- Designed the creative collective DAO that enables creators and investors to collaborate with treasury, governance, membership, and management modules.   ▪ Determined the startup's organizational structure, bylaws, project pipelines, and community requirements.   ▪ Mentored members and projects on software (CGI, AI), hardware, and project management.

Lead Developer – Pera Finance, Istanbul, Turkey   **Dec 2021 – Dec 2022**
- Increased code efficiency of the first-ever DeFi trading competitions to eliminate most of the gas costs.   ▪ Designed the next version with customizable competitions created with a factory contract to support future modules and other projects.   ▪ Oversaw copywriting and content creation together with a marketing agency, creating a social marketing campaign to a larger audience.

Robotics Engineer – Radiation Safety & Control Services , Hampton, NH   **May 2020 – Dec 2021**
- Converted a radiation-scanning cart into a robotic platform with live LIDAR-based SLAM, dynamic URDF model, and diagnostics. Updated the data collection model with continuous, automated binning and visualization.   ▪ Designed and built multiple sensor circuits for gas supply control for Arduino and Embedded PCs.   ▪ Designed a radiation source test unit with position control with an rPI-controlled actuator, custom-boot Ubuntu and a web-based touchscreen interface.

Lead Systems Engineer – myRide, Chelmsford, MA   **March 2019 – April 2020**
- Implemented a drive-by-wire control system on KIA Soul EV using Arduino and Jetson boards, designed and prototyped the mechanical assembly, with designing most of the custom hardware and software.   ▪ Implemented vision and control modules on ROS, improved controller firmware, and CAN interface.   ▪ Prototyped the controller enclosures, harnesses, interior panels, a gear-shifter, and the installation scheme.   ▪ Carried out investor presentations and screened potential hires.

Lab Assistant – Human-Inspired Robotics Lab, WPI, Worcester, MA   **Nov 2017 – Feb 2019**
- Supervised graduate research and undergrad project teams that focus on teleoperation, mobile humanoids, and perception.   ▪ Implemented USB, mocap, and voice controllers for a ROS robotic platform as well as its workstation and embedded system.   ▪ Rewritten the system procedures to reduce training time to 2 hours from 9 with better user performance.   ▪ Implemented a multicamera Android VR app with a companion Linux app to monitor perception experiments.

Graduate Assistant – Amazon Robotics, WPI, North Reading, MA   **Jul 2017 – Aug 2017**
- Mentored elementary and middle school students in SPARK, Junior Robotics Challenge Program(at Amazon Robotics) and LAUNCH weekly Robotics camps and coordinated undergraduate instructors.

Technology Consultant – MainScreen, Istanbul, Turkey (Hybrid)   **Aug 2016 – Present**
- Saved the entire outdoor signage budget by deploying an open-source system hosted on own servers with Ubuntu nodes.

Education

Worcester Polytechnic Institute (WPI)   **Worcester, MA**
- *Master of Science*, Robotics Engineering, 3.3   *May 2019*
- *Bachelor of Science*, Robotics Engineering, 3.54   *May 2016*

Coursework Summary

Motion Planning, Systems Engineerinsubsectiong, Computer Vision, Robot Control, Dynamics & Navigation, Deep Learning, Machine Learning, AI, DSP, Embedded Systems

Honors

Presidential Scholarship, Turkey – 33rd in the nation.

Charles O. Thompson Scholar, WPI

Skills

Programming	Software	Embedded	Professional	Language
C++	ROS	Jetson	Systems Engineering	Fluent English
Python	Linux	Raspberry PI	Circuit Design	Native Turkish
JavaScript	OpenCV	Arduino	Robot Control	Beginner German
Solidity	QT	MSP	Sensor Modules	
MatLab	tensorflow		CAD	