Yasar Idikut

⌂ yasar.idikut.cc | in linkedin.com/in/yidikut | ✈ yasar@idikut.cc

EDUCATION

Worcester Polytechnic Institute, Worcester, MA   May 2026
*Master of Science, **Robotics Engineering** | GPA 3.8/4.0*
Research: *High-Order Control Barrier Functions for Quadcopters*

Worcester Polytechnic Institute, Worcester, MA   May 2024
*Bachelor of Science, **Computer Science & Robotics Engineering** | GPA 3.7/4.0*
Thesis: *Multi-Robot Persistent Coverage Under Fuel and Stochastic Failure Constraints, see* ⌂ ○

SKILLS

Programming/Frameworks: Python, Go, Rust, Java, C/C++, PyTorch, OpenCV, ROS

Cloud/DevOps/Testing: Docker, Kubernetes, Ansible, Terraform, Jenkins, GitHub Actions, AWS, Pytest

EXPERIENCE

Otuken Software Company USA LLC, Remote   Jun 2024 - Aug 2025
Freelance Software Engineer in Cloud, Computer Vision, and Embedded Software

- Delivered a custom web application to accurately predict multi-copter flight time (**90%+ accuracy**) using thrust and battery data, enabling **data-driven decision-making** for deployment strategy.
- Developed a **suite of calibration tools** for zoom-enabled PTZ cameras, facilitating precise intrinsic and extrinsic parameter estimation across varying zoom levels, significantly improving the 3D projection errors.
- Designed and deployed an on-premises Git server infrastructure, and created CI/CD pipelines to automate the build process for various embedded projects, resulting in **faster new firmware retrieval** across teams.

Worcester Polytechnic Institute, Worcester, MA   Oct 2022 - Sep 2023
Teaching Assistant for Computer Networks and Systems Programming Concepts

- Worked with students to **troubleshoot** their coding problems, **assisted** with answering students' questions, and contributed to grading for the 2000 / 3000 level CS courses.

Bose Corporation, Framingham, MA   Jun 2023 - Aug 2023
Cloud Software Engineering Intern

- Designed and developed a **flexible functional integration testing infrastructure** for an **internal project involving multiple teams**, incorporating **signal mechanisms** to simulate real-world scenarios.
- Enhanced the developer experience by **streamlining local testing and component development**.
- Integrated mock testing into the **CI/CD pipeline** in partial automation of the validation processes.

CodaMetrix, Inc., Remote   Jun 2022 - Aug 2022
DevOps Engineering Intern

- Automated the toggling of deployment resources by utilizing **Ansible** and **Terraform** and an integration in Jenkins to **save 15-20 minutes of manual process for each deployment**.
- Enhanced Slack messaging integration within **Jenkins** to facilitate ChatOps, ensuring developers stay informed about a job' progress, consequently halving wait times in the event of errors in the earlier phases.
- Developed a **custom Datadog agent in Go** and created an alert hook to improve observability.

OPEN SOURCE

WireGuard VPN Management Tool: wg-quickrs, *For more details, see* ○   Jun 2025 - Current

- Built a **Rust**-based WireGuard configuration management tool with a secure web API/frontend.
- Streamlined **cross-platform** firewall and installation procedures using **bare-metal static binaries** and **dockerized deployment** options with automated CI/CD pipelines on **GitHub Actions**.