Viresh Duvvuri

19928 bothell everett hwy, Bothell, WA, 98012 • vireshduvvuri@gmail.com • +1-509-964-5469

linkedin.com/in/viresh-duvvuri/

Education

2015 – 2017
Pullman, WA, USA

Washington State University, *Master of Science, Computer Science*
- Thesis Title: "Development of Baton: A Novel Precision Delivery Drone"
- Advisor: Dr. Matthew E. Taylor, Assistant Professor, Department of Electrical Engineering & Computer Science

2011 – 2015
Visakhapatnam, India

GITAM University, *Bachelor Of Technology, Information Technology*

Skills

Programming
Python, C++, React, Docker, Git, SQL, Android, OOP, Mutlthreading

Code Base & Framework
PX4, Arudpilot, mavlink, mavsdk, pymavlink, wireshark, UAVCAN

Embedded Framework
RTOS, I2C, UART, SPI, CAN, STM32

OS & Version Control
Linux (bash scripting), Windows(bat files), Git, Testrails, Notion

Work Experience

11/2021 – present
Woodinville, WA, USA

Freefly Systems, *Drone Systems Engineer*
- Led cross-team projects from requirements gathering through deployment and coordinated with internal teams to maintain project visibility
- Built diagnostic tools and tracking systems including log reviewers and issue trackers to resolve technical problems and ensure optimal drone performance
- Developed core drone software components optimizing flight control systems and enhancing payload integration capabilities
- Streamlined production processes and automated support workflows to improve response times and team productivity
- Led technical support operations for the drone division, analyzing drone crashes and working with cross-functional teams to identify root causes and troubleshoot systems for manufacturing teams and customers

07/2020 – 10/2022
Sarasota, FL, USA

Lumenier, *Software Engineer*
- Developed and customized flight modes in PX4 for features like Toss to Launch and integrated custom sensors using protocols such as MAVLink and UAVCAN.
- Led the software development process: planned release cycles, coordinated efforts with the maintainer of the PX4 codebase to optimize GPS, GPS-denied position-hold, and obstacle avoidance across different lighting conditions.
- Designed and executed robust test procedures to validate firmware with each release. Analyzed logs to determine root causes for critical bugs and scoped fixes for the next release cycle.

08/2018 – 03/2020
York, PA, USA

York Exponential, *Robotics Research & Development Engineer, Computer Science*
- Developed a prototype software for in-house autonomous surveillance mobile robots. Implemented vision & autonomous navigation algorithms
- Developed Human Machine Interface to program a collaborative robotic arm - Universal Robot for welding application
- Implemented features for a Multi-Robot Control System, focusing on platform independence and system reliability