Aadhya Puttur

Hands-on experience in project management with a background in software engineering

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EDUCATION

Worcester Polytechnic Institute May 2023

BACHELOR'S, COMPUTER SCIENCE

SKILLS

Skills: Roadmap Planning & Execution, Stakeholder Engagement & Requirement Gathering, Agile Project Management, Cross-Functional Collaboration, Data-Driven Decision Making, Python, Java, React Native, C, C++

PROFESSIONAL EXPERIENCE

Anduril **Costa Mesa, CA, USA**

Mission Software Engineer, Air Defense *April 2024 - Present*

- Led the development and deployment of a new sensor integration system, improving detection speed by 60% and increasing the number of detected drones by 50%, while aligning solutions with military client operational needs.
- Collaborated with cross-functional teams to analyze system performance, running tests at real classified military installations to optimize defense capabilities.
- Developed an automated system to migrate computer vision models for 70% of Anduril's product lines from a deprecated cloud platform to a new one, enabling 60% of internal teams to continue seamless usage.
- Acted as the on-call specialist for Air Defense Systems, ensuring 99% availability and resolving issues within an average of 5 minutes during classified tests, strengthening client relationships.

Skydio **Boston, MA, USA**

Autonomy Engineer Intern *July 2023 - September 2023*

- Delivered real-time error-sensing and communication features for Skydio X2 drones, reducing pilot errors by 20% and improving safety.
- Defined and developed the 'Max Endurance' feature, optimizing drone energy consumption by 18%, leading to a 15% increase in flight time and enhancing product performance based on client feedback

MIT Lincoln Laboratory **Lexington, MA, USA**

Research Technical Intern *July 2022 - August 2022*

- Enhanced airborne LiDAR data accuracy by creating algorithms to predict and fill missing data points, increasing data completion by over 60%.
- Conducted system performance analysis, reducing processing time by 83.7%, and collaborated with stakeholders to integrate feedback into solution improvements.

Research Technical Intern *July 2022 - August 2022*

- Optimized Arduino MKRZero communication speed, reducing serial data transfer time by 20 ms through code efficiency improvements.
- Developed radar technology for motion detection and collaborated with teams to troubleshoot, document, and propose alternative communication protocols, enhancing data transfer consistency.

Raytheon BBN Technologies **Cambridge, MA, USA**

Software Engineering Intern *May 2020 - August 2020*

- Developed a robust communication system between a hierarchical task network (HTN) and MySQL databases to optimize drone swarm operations.
- Coordinated with teams to ensure smooth data exchange and execution, utilizing Docker for containerized solutions.

Research Technical Intern *July 2019 - August 2019*

- Built a communication network between Skydio's R1 drone and another drone using TCP connections and multithreading in Java, ensuring effective communication between the devices.
- Gained expertise in Skydio's API to transmit commands and control the drone's operations, contributing to the development of more reliable and agile drone technology.

PROJECTS & OUTSIDE EXPERIENCE

Bipedal Quadruped Robot **Worcester, MA, USA**

WPI Major Qualifying Project *August 2022 - March 2023*

- Managed a team of four engineers as the Computer Vision Lead of 12 Degrees of Freedom Quadruped Robot, implementing algorithms for obstacle detection and target tracking.
- Ensured successful product delivery while adhering to project timelines and requirement while collaborating with teammates.

WPI Mass General Brigham Hospital **Worcester, MA, USA**

Software Lead *March 2022 - May 2022*

- Led the development of a 20,000-line full-stack application as part of a 10-person Agile team, overseeing both front-end and back-end integration.
- Reorganized the team's workflow and adopted Agile methodologies, ensuring successful iteration cycles and timely feature delivery.

Spectrum (WPI COVID Innovation Challenge) **Remote**

Hackathon Winner *July 2020 - July 2020*

- Designed and prototyped a UV-enabled PPE mask to kill germs during the COVID-19 pandemic, within a three-day sprint.

Computer Vision Graduate Course **Worcester, MA, USA**

Computer Vision Graduate Course *October 2022 - October 2022*

- Successfully created Face Swap by utilizing Triangulation and Thin Plate Spline

Edge Detection And Image Filtering **Worcester, MA, USA**

Computer Vision Graduate Course *October 2022 - October 2022*

- Implemented PB boundary detection algorithm by creating image processing tools: using Pytorch

Panorama Stitching **Worcester, MA, USA**

Computer Vision Graduate Course *October 2022 - October 2022*

- Implemented feature matching and RANSAC algorithm and calculated homography between two images

Camera Calibration **Worcester, MA, USA**

Computer Vision Graduate Course *October 2022 - October 2022*

- Optimized camera parameters by reducing reprojection error by 11%

INTERPERSONAL SKILLS

Co-Captain/Founder Rangeela BollywoodFusion Dance Team - *WPI* Aug 2021 - June 2023

Resident Advisor - *WPI* Aug 2020 - June 2023

TEDXYouth Finalist - Beacon Street, Boston November 2018

MAHacks Organizer - Boston