Aadhya Puttur

A creative hands-on motivated leader and software developer

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EDUCATION

Worcester Polytechnic Institute (WPI), Worcester, MA May 2023
Bachelor of Science, Computer Science

SKILLS

Skills: research, computer vision, GitHub, problem-solving, API documentation, wireframing, mockup UI, user stories, coding standards, integration testing
Languages: Python, Java, React, Next.js, PyTorch, C++, Javafx, Javascript, Matlab, SQL
Tools: Jira, Git, OpenCV, Docker, Linux, Agile Methodology, AWS, Prototyping, Scrum, Figma
Related Coursework: Computer Vision (graduate), Algorithms: Design And Analysis (graduate), Machine Learning, Software Engineering, Accelerated Object-Oriented Design Concepts, Mobile Ubiquitous Computing

PROFESSIONAL EXPERIENCE

Autonomy Engineer Intern - *Skydio*, Boston, MA June 2023- Sept 2023
- Launched MAVLINK System error sensors communication on Skydio X2 drones to assist the drone in going through flight phases and communicating necessary errors
- Launched a Skydio skill through the development of the max endurance skill using Skydio API

Research Technical Intern - *MIT Lincoln Laboratory*, Lexington, MA June 2022- August 2022
- Used tangent plane of hole boundary points to fill 290 holes in a 3D point cloud in 920 milliseconds

Research Technical Intern - *MIT Lincoln Laboratory*, Lexington, MA May 2021- August 2021
- Assembled a coffee can radar and implemented a method to properly transfer it to work with the Arduino

Research Technical Intern - *Raytheon BBN Technologies*, Cambridge, MA May 2020 - August 2020
- Created a task that is part of a hierarchical task network and tested swarms of drones in simulation

Software Engineering Intern - *Raytheon BBN Technologies*, Cambridge, MA June 2019 - August 2019
- Created a communication network between Skydio's R1 drone with an unidentified drone using TCP

PROJECTS

Researcher, Quadruped Robot - *WPI Major Qualifying Project* Aug 2022 - March 2023
- Created a 2D occupancy map using calibrating real sense cameras to achieve the depth of the environment

Software Lead - *WPI Mass General Brigham Hospital* March 2022 -April 2022
- Led the development of 50 classes and 6 subsystems, as part of a 10 personal, Agile Scrum team for a full-stack Java application for employees of Mass General Brigham Hospital

SfM (Structure from Motion) and NeRF (Neural Radiance Fields) - *Computer Vision* Nov 2022
- Minimized error using classical SfM technique and implemented NeRF

FaceSwap - *Computer Vision* Oct 2022
- Successfully created Face Swap by utilizing Triangulation and Thin Plate Spline

Edge Detection and Image Filtering - *Computer Vision* Sept 2022
- Implemented PB boundary detection algorithm by creating image processing tools: using Pytorch

Panorama Stitching - *Computer Vision* Sept 2022
- Implemented feature matching and RANSAC algorithm and calculated homography between two images

Camera Calibration - *Computer Vision* Sept 2022
- Optimized camera parameters by reducing reprojection error by 11%

UI/UX Research Assistant - *WPI* July 2022 - Aug 2022
- Designed the UI to visually demonstrate natural language processing in a digestible manner

Hackathon Winner - *WPI COVID Innovation Challenge*, Spectrum June 26, 2020
- Prototyped a COVID-19 PPE mask in three days for the challenge that uses UV light to kill germs.

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 March 2018 - June 2019