Aadhya Puttur

A creative hands-on motivated leader and software developer

putturaadhya@gmail.com | aadhyap.github.io | github.com/aadhyap | linkedin.com/in/aadhyaputtur

EDUCATION

Worcester Polytechnic Institute (WPI), Worcester, MA

May 2023

Bachelor of Science, Computer Science, GPA: 3.55/4.0

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, Apache, 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

H (I EIG O I (I E O I I E E E E E E E E E E E E E E E	
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