HIMANEESH YERRAKALVA
COMPUTER SCIENCE STUDENT

CONTACT

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EDUCATION

University of Michigan - Ann Arbor ·
Sept. 2018 to Current
B.S.E Computer Science 2022
Cumulative GPA: 3.761
Relevant coursework: Data Structures and Algorithms, Intro to Computer Organization, Intro to Computer Security, Foundations of Computer Science, Linear Algebra, Discrete Mathematics, Multivariable Calculus

SKILLS

TECHNICAL SKILLS: C++, C#, CSS, Git, HTML, JavaScript, Typescript, Python, MATLAB, Microsoft Office, Virtualization, Windows & Linux
SOFT SKILLS: Adaptability, Communication, Problem Solving, Self Motivation

PROJECTS

Blue Bus Companion
Oct. 2019 to Current
- Designed a Google Assistant app to be used by University of Michigan students allowing them to use voice commands to retrieve information about nearby campus buses, with the help of the Dialogflow natural language processing framework
- Ensured delivery of real-time transit data to the user in a conversational format by writing Firebase cloud functions running on a Node.js backend that fetch data from the publicly accessible DoubleMap API provided by the university

Light Strip Manager
July 2018 to Feb. 2019
- Created a Raspberry Pi program that controls the power of attached LED strip depending on user presence in room which is inferred through the ability to ping the user's smartphone via Bluetooth, resulting in energy savings without manual intervention
- Enhanced this program by running a Flask server which controls master power of the LED strip depending on the type of HTTP request received and building IFTTT applets to interface with the Flask server via Google Assistant and home screen widgets, giving the LED strip IoT-like capabilities

EMPLOYMENT

Atlas Digital Consulting Group
Ann Arbor, MI
VP of Internal Operations · May 2020 to Current
- Maintain communication with club members via emails and weekly meetings to keep members informed with club-related news and reminders
- Facilitate logistical changes so that the club can remain fully operational in midst of the COVID-19 pandemic

Consultant · Sept. 2019 to May 2020
- Provide technological solutions to local businesses in Michigan in a pro bono manner by making use of computer science experience and problem-solving skills
- Assisted a local restaurant through its rebranding process by designing a modern front-end for its website with the assistance of the Bootstrap framework for HTML, CSS, and JavaScript
- Implemented an SVM text classifier in scikit-learn and deployed it as an Apple Core ML model to determine relevance of news articles in an iOS news aggregator app

Ford Motor Company
Dearborn, MI
Software Engineer Intern · June 2020 to Aug. 2020
- Developed a Python tool to parse and analyze QNX kernel event trace files
- Identified top I/O bottleneck processes that degrade performance of the SYNC 4 infotainment system

Powertrain Controls Research Intern ·
June 2018 to Aug. 2018, May 2019 to Aug. 2019
- Supported automation of Hardware-in-the-loop (HIL) simulation with the dSPACE Scalexio system by using the ECU-TEST automation software
- Produced a tool that speeds up ECU instrument creation in dSPACE ControlDesk using information from MATLAB Simulink

U-M Intelligent Ground Vehicle
Ann Arbor, MI
Computer Vision Sector Lead · Aug. 2018 to Current
- Enabled autonomous robot to determine an optimal path based on input received by attached ZED stereo camera by utilizing C++ and CUDA based OpenCV libraries
- Integrated CV algorithms into ROS (Robot Operating System) running on Nvidia Jetson TX2