HIMANEESH YERRAKALVA

COMPUTER SCIENCE STUDENT

yerrak@umich.edu 734-431-2007 49553 Lansdowne St, Canton, MI 48188
hyerrakalva

EDUCATION

University of Michigan - Ann Arbor Sept. 2018 to Present
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

EXPERIENCE

Atlas Digital Consulting Group Ann Arbor, MI
Consultant Sept. 2019 to Present

- Providing 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

Ford Motor Company Dearborn, MI
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
- Created external interfaces capable of creating packages & test environments to be used within ECU-TEST
- Produced a tool that speeds up ECU instrument creation in dSPACE ControlDesk using information from MATLAB Simulink
- Leveraged Python and database knowledge to automate testing

U-M Intelligent Ground Vehicle Ann Arbor, MI
Computer Vision Sector Member Aug. 2018 to Present

- 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

SKILLS

TECHNICAL SKILLS: C++, C#, CSS, Git, HTML, JavaScript, Python, MATLAB, Microsoft Office, Unreal Engine 4, Virtualization, Windows & Linux
SOFT SKILLS: Adaptability, Communication, Problem Solving, Self Motivation

PROJECTS

Blue Bus Companion Oct. 2019 to Present

- 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