VIVEK HANASOGE

6350 Branford Drive, West Bloomfield, MI 48322
248.921.9068 || hanasogevivek@gmail.com || https://vivekh99.github.io/Viveks_Website

EDUCATION

University of Michigan - Ann Arbor, MI (2017 - Present) *US CITIZEN*
Major: **BSE Electrical & Computer Engineering** GPA: 3.1/4.0
Expected Graduation: May 2021

Relevant Coursework: Matrix Algebra, Programming and Data Structures, Data Structures and Algorithms, Intro to Circuits, Intro to Logic Design, Intro to Signals, Intro to Computer Architecture, Embedded Control Systems, Intro to Operating Systems, Data Oriented Programming

EXPERIENCE

Enertia Microsystems Inc.
Embedded Systems Intern – Ann Arbor, MI June 2019 – October 2019

- Worked with original developers to further program open-source software for Red Pitaya board to implement a Digital Phase Locked Loop which takes in input from a MEMS gyroscope and produces corrective feedback.
- Used Xilinx's Vivado to implement software and hardware changes for Red Pitaya's Zynq7010 SoC.
- Using Python and C to develop client-server (TCP/IP) program to provide input from a python GUI to a C server to write to custom and preconfigured IP modules using memory mapped I/O so that users could input custom data to Red Pitaya.

CROMA Research Lab
Undergraduate Research Assistant – Ann Arbor, MI May 2019 – December 2019

- Currently working on research project "Disposable Classifiers", which involves using computer vision algorithms in conjunction with crowdsourcing to create a set of rules that defines a user query and then use a classifier that can identify the query within a long video.
- Implemented UI using React and CV techniques using YOLOv3.

HAI Engineering Consultants
Engineering Intern – West Bloomfield, MI May 2018 – Aug 2018

- Maintained records of ISO 17025 and ISO 9001 engineering standards for use in audit reports and customer interaction.
- Validated companies according to ASTM standards in relation to testing and calibration of measuring devices
- Used MATLAB to evaluate material data sets through inter-laboratory comparison.

PROJECTS

FindmyUMclass.com (Python, PHP, MySQL, HTML, CSS, JavaScript): July 2019 – Present

- Used python's Selenium library to web scrape grade information of all offered U-M courses.
- Using PHP, HTML, CSS, and JS, developing database backed website where users can search for an attribute of a course and search results will display relevant courses.

Professional Website (HTML, CSS): May 2019 – June 2019

- Developed a professional website that displays information about myself such as my projects, academic interests, resume, and extracurricular activities.
- Used HTML and CSS to learn intricacies of web design; running website can be found at link in header above.

To-Do List to Lock Screen Android App (Java): December 2018 – February 2019

- Programming android application that shows user a To-Do list from which they can input a list of tasks and save those tasks to avoid data re-entry.
- User can also take a screenshot and open the Gallery app to view the screenshot all from within the app, and then choose to set it as their lock screen.

Machine Learning Classifier (C++): November 2018 – December 2018

- Developed a Bayesian statistical model to classify discussion board posts into predefined categories to an accuracy of 87%.
- Used supervised machine learning techniques in conjunction with probabilistic word frequencies to infer likely groupings for each post.

SKILLS/TRAINING

- Software: C++, Python, Java, HTML, CSS, Verilog, MATLAB, PHP, SQL
- Hardware: LTSpice, Altium Designer 19, Quartus II CAD, Red Pitaya, Vivado
- GitHub: https://www.github.com/vivekh99