# VIVEK HANASOGE

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**
Expected Graduation: April 2021

**Relevant Coursework:** Data Structures and Algorithms, Intro to Circuits, Intro to Logic Design, Intro to Signals, Intro to Computer Organization, Embedded Control Systems, Intro to Operating Systems, Data Oriented Programming, Intro to Embedded Systems, Computer Vision, Computer Networks, Applied Parallel Programming with GPU's

## INDUSTRY EXPERIENCE

**Podium** – Lehi, UT
Data Science Intern June 2020 – August 2020

- Worked with highly configurable Facebook Prophet Python library to ingest Podium data and create projections from the train data, which was then visualized in DOMO.
- Queried data from PostgreSQL databases using SQL, data was then run through the Prophet model taking in custom parameters from a YAML file to make final projections, whose pandas DataFrame was written to a MySQL database, that was then queried in timely intervals to be visualized.

**Enertia Microsystems Inc.** – Ann Arbor, MI
Embedded Systems Intern 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 changes for the Red Pitaya's Zynq7010 SoC.
- Used 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** – Ann Arbor, MI
Undergraduate Research Assistant May 2019 – December 2019

- Worked 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.

**HAI Engineering Consultants** – West Bloomfield, MI
Engineering Intern May 2018 – August 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 – Dec 2019

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

**Personal Website (HTML, CSS):** May 2019 – July 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.

# VIVEK HANASOGE

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

**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.

**Calculator Android App (Java):** June 2018 – July 2018

- Programmed android application using Android Studio that performs calculations on two numbers inputted by user.
- Application has ability to add, subtract, multiply, and divide any two whole numbers provided.

## SKILLS AND TRAINING

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