# Tanvi Jivtode

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Driven and goal-oriented Computer Engineering student excited about the embedded systems space; seeking an internship in embedded software or hardware for **Summer 2021**.

#### **EDUCATION**

#### **University of Michigan (Computer Engineering)**

Bachelor of Science in Engineering, College of Engineering; Cumulative GPA: 3.60

Ann Arbor, MI Expected 2022

#### **Skills**

Extensive knowledge of C, C++, Verilog (FPGA), MATLAB

Familiar with NodeJS, Javascript, HTML, Python, Bash, Flask, PostgreSQL, ARM, Angular Platforms and Applications: Windows 10, Linux, Git, EAGLE/Altium, OpenSCAD, Arduino, Quartus

**Curriculum Highlights** 

Intr. Embedded Systems (EECS 373), Intr. Circuits (EECS 215), Quantum Nanotechnology (EECS 428), Data Structures and Algorithms (EECS 281), Logic Design (EECS 270), Discrete Math (EECS 203), Computer Science Pragmatics (EECS 201), Computer Architecture (EECS 370)

**Organizations** 

Society of Women Engineers (SWE), Women in Electrical and Computer Engineering (WECE), Michigan Sahana

Fred J. Page High School

Honors Diploma, Scholars Diploma, Salutatorian for Class of 2018; Cumulative GPA: 4.00

Franklin, TN 2014 – 2018

## **EXPERIENCE**

## Mcity - Connected and Automated Vehicle Test Facility

Software Engineering Intern

Ann Arbor, MI May 2020-

Present

- **Current project:** Implementing a lightning detection and notification system (using C++ for sensor programming and Python for PostgreSQL/server interactions)
- Produced two wireless trigger devices, a button-based and LiDAR-based trigger (from printed circuit board design in EAGLE and firmware in C++ to server connection in Flask) used to set off facility events
- Developing IoT devices that add user-friendly and environmental elements to computerized tests to help improve testing of autonomous/connected vehicles
- Contributing to the facility's central server API, OCTANE, using the Flask framework

#### **Michigan Electric Racing**

Electric Vehicle Powertrain Team Member

Ann Arbor, MI Sept 2019 -

- **Most recent project**: Developed a schematic and printed circuit board for high voltage circuits, particularly a shutdown circuit (safety loop) for the powertrain
- Prototyping PCBs (in Altium) and building circuit boards to be used in the powertrain
- Becoming familiar with STM32 programming

## DaVita Inc.

*Application Development Intern* 

Brentwood, TN

June 2019 – August 2019

- Assisted the team with evaluating user requirements and developing user interfaces for clinical tools using the Angular framework
- Gained experience with production, test suites, and debugging in the Angular framework to build effective solutions while improving problem-solving skills

### RESEARCH

#### **UofM Multidisciplinary Program**

Researcher, Mapleseed: Sensor Network Laboratory

Ann Arbor, MI

Jan 2020 -

• **Current project**: Programming of a set of EZ430-RF2500 transceivers to employ their wireless capabilities as part of Mapleseed flyers

• Member of the Mapleseed research project under Professor Xiaogan Liang

Present