# 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)** — *Ann Arbor, MI*
*Bachelor of Science in Engineering, College of Engineering;* Cumulative GPA: 3.49 — *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** — *Franklin, TN*
*Honors Diploma, Scholars Diploma, Salutatorian for Class of 2018;* Cumulative GPA: 4.00 — *2014 – 2018*

## EXPERIENCE

**Mcity - Connected and Automated Vehicle Test Facility** — *Ann Arbor, MI*
*Software Engineering Intern* — *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** — *Ann Arbor, MI*
*Electric Vehicle Powertrain Team Member* — *Sept 2019 - Present*

- **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.** — *Brentwood, TN*
*Application Development Intern* — *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** — *Ann Arbor, MI*
*Researcher, Mapleseed: Sensor Network Laboratory* — *Jan 2020 - Present*

- **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