# Sharang Karve

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### **EDUCATION**

University of Michigan College of Engineering Ann Arbor, MI

Expected Graduation Dec. 2018

- B.S.E. Computer Engineering
- Relevant coursework: Intro. to Engineering in Wireless Communication, Data Structures and Algorithms, Circuits, Digital Logic Design, Signals and Systems
- Current GPA: 4.0 / 4
- Member of Institute of Electrical and Electronics Engineers (IEEE)

## Troy High School Troy, MI

Graduated 2015

- 4.0 GPA (4.4 weighted)
- Member of National Honors Society

## **TECHNICAL SKILLS**

- Proficient in C, C++, Java, Ruby, and Matlab
- Some experience in Verilog, HTML, CSS, and Javascript
- Computer assembly and repair
- Experience with basic AutoCAD, Quartus II, NI Multisim, Maple, and some audio and video editors

### **EXPERIENCE**

Engineering Learning Center (Tutor)

2016-Present

• Tutoring students in various engineering subjects including programming, chemistry, and differential equations

## <u>Departmental Computing Organization</u> (Computer Consultant)

2015-2016

- Troubleshot computer hardware for the university's EECS (Electrical Engineering and Computer Science) department by testing components for failure
- Fulfilled support requests from EECS faculty by selecting components, assembling computers, and installing software, operating systems, and updates

<u>Class Projects</u> 2015-Present

- Collaborated with a team to create a device that transmitted text messages through ultrasound using BPSK by programming an ARM processor in C
- Created various C++ programs (such as a log manager and a Travelling Salesman Problem solver) that had to run under strict time and memory constraints
- Designed various machines such as a traffic light system and a video game controller interface using an FPGA programmed in Verilog HDL.

<u>Personal Projects</u> 2014-Present

- Attended several hackathons: MHacks, Code Day, Automation Alley Hack4Detroit, etc.
- Developed various applications such as a Poker hand simulator in Ruby, a cloud storage program in Java, and a NodeJS app to help families plan a day in Detroit
- Worked individually and with a mentor to create some Arduino programs, including a multimeter interfaced with Ruby and Matlab GUIs

#### Computers Club (Leadership Team Member, Volunteer Tutor)

2013-2015

- Taught Java, HTML, and computer hardware basics to middle school students
- Improved interpersonal skills by coordinating with middle school staff and overseeing club affairs

## NON-TECHNICAL EXPERIENCE

- Tutored high school students in math and volunteered at community events through National Honors Society
- Volunteered at Cranbrook Institute of Science (Bloomfield Hills, MI) interacted with public during events
- Competitive table tennis player