Prakash Kumar

Contact Information

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Education

University of Michigan, Ann Arbor, MI

B.S., Computer Engineering **Sep 2016 – May 2020**

Current Cumulative GPA: 3.70/4.00

Professional Experience

Robotics Toolkit Workshop, Ann Arbor, MI

Pilot Student **Sep 2017 – Nov 2017**

- Worked with Professor Peter Gaskell as a pilot student testing a new program for graduate students.
- Design, built, and tested an autonomous line-following robot using a beaglebone, IMUs, a custom line-sensing PCB module, and motors.

HealthPals, San Francisco Bay Area, CA

Software Engineering Intern **May 2017 – August 2017**

- Full Stack liaison between the frontend and backend engineering teams in the development of the CLINT product(developed in python and react.js), designed to give value based decisions to clinicians at the point of care.
- Analyzed several thousand anonymous patient records while providing useful insights on patients' risk for cardiovascular disease by writing a Population Dashboard using javascript, python/pandas, and seaborn.

Underwater ROV Design/Build/Test, Ann Arbor, MI

Student/Hardware Engineer **Jan 2017 – May 2017**

- Built an underwater ROV to compete in a competition for the Engineering 100 class at the University of Michigan.
- Used Arduinos and RF transmitters/receivers to build a remote control and bluetooth camera system allowed complete control and vision of the underwater ROV.

Internet of Things Home Automation, Northville, MI

Side Project **Aug 2015 – Jun 2017**

- Developed a RESTful API for my personal garage using Twilio, Node.js and a Raspberry Pi that controlled the garage via web application, text message or android application for easy access to the house.

Blind Sensor Navigation, Northville, MI

Side Project **Nov 2013 – Jun 2014**

- Built a device running on an ATMega328p microcontroller that helps a visually impaired individual navigate around their surroundings. Received 1st place IEEE award at the 2014 Science and Engineering Fair of Metro Detroit.

Relevant Coursework

- EECS 281: Data Structures and Algorithms, designing and writing efficient programs in C++
- EECS 270: Introduction to Logic Design, programming FPGAs with Verilog HDL

Leadership

Music Director of Maize Mirchi A Cappella, a South Asian interest a cappella group on campus. President of the Bursley Hall Council, managed funds, sponsored local organizations and led community events for the benefit of residents.

Programming Experience

Languages: Verilog, Python, Javascript, CSS, C, C++, C#, Unity, Bash, LaTeX
Other Technology: Arduino, Raspberry Pi, Soldering, PCB design, Redis, SQL, MongoDB,