# Markan S. Patel

markanp@umich.edu

cooltoast.github.io | github.com/cooltoast

#### Education

#### BS | GRADUATING DEC. 2015 | UNIVERSITY OF MICHIGAN, ANN ARBOR | GPA: 3.596

- · Major: Biomedical Engineering
- · Minors: Computer Science & Electrical Engineering
- Relevant Coursework: EECS 281: Data Structures and Algorithms (C++) ENGR 101: Programming C++ and MATLAB

EECS 280: Programming & Intro Data Structures (C++) EECS 203: Discrete Mathematics

#### **Technical Skills**

#### PROFICIENT IN

· Python, JavaScript, C++, C, Git, HTML/CSS, MATLAB

#### **FAMILIAR WITH**

- · Android, Java, Ruby, Bash, SQL, MongoDB, Flask, Node.js, AngularJS, Express, jQuery
- · Managing source code on GitHub, serving Flask web apps with Apache, Ruby on Rails web apps on Heroku.

### **Experience**

#### SOFTWARE ENGINEERING INTERN | NEPHOSITY, INC. | MAY 2014 - AUG. 2014

- · Developed a RESTful API with Python Tornado Web Server to upload/download medical images and manage consultations, cases and conversations between doctors and patients.
- · Wrote Python scripts to manage and run API unit tests and functional tests.
- · Worked on the JavaScript-based DICOM medical image dragdrop viewer at <a href="https://beta.jackimaging.com/demo">beta.jackimaging.com/demo</a>, which parses and maps the DICOM files for the JavaScript viewer to display.

#### SOFTWARE DEVELOPER INTERN | WIRELESS INFORMATION NETWORK LAB, RUTGERS UNIV. | MAY 2013 - AUG. 2013

- · Created CannyCam, an image detection Python & OpenCV program using Canny Edge Detection and Haar Cascades to isolate and detect anatomical parts.
- · Worked on HUDOutput, Android app using a MOD LIVE Heads Up Display and Android phone to recognize faces from a database, and displaying relevant information.

## **Projects**

#### CODEBASE MANAGER @ MICHIGAN HACKERS | SEPT. 2014 - PRESENT

- · Develop and maintain open-sourced websites and mobile apps for projects like MHacks and Learn2Hack.
- · Improve students' access to open-sourced tutorials and UMich APIs, available at <a href="mailto:github.com/michiganhackers">github.com/michiganhackers</a>.

#### ANDROID APP & WEBSITE: WHERE-IS-MY-CHILD.HEROKUAPP.COM | MAY 2014

- · Developed Android app that sends GPS coordinates of the device to the WhereIsMyChild web app.
- · Created Node.js web app that handles coordinate input requests from Android app & stores coordinates into SQL database, and displays the coordinates on a map using the Google Maps API.

#### WEBSITE: RIGHT4LEFT.COM | 2011 - 2013

· Created website with Ruby on Rails for sharing my experiences in learning to play left-handed tennis. Currently developing an application with Android for logging and tracking training sessions.

## **Awards & Recognition**

- · Placed on U of M's Dean of Engineering's Honor List, Fall 2013 & Winter 2014 semesters
- · Inducted into the Mathematics Honor Society Chapter at WW-P High School South, NJ, 2010
- · State Award for High Honors in SAT Math Section, Johns Hopkins University Talent Search, 2008