

# Markan S. Patel

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markanp@umich.edu

[cooltoast.github.io](https://cooltoast.github.io) | [github.com/cooltoast](https://github.com/cooltoast)

## Education

**BS | GRADUATING DECEMBER 2015 | UNIVERSITY OF MICHIGAN, ANN ARBOR | GPA: 3.596**

- Major: Biomedical Engineering
- Minors: Computer Science & Electrical Engineering
- Related Coursework: EECS 281: Data Structures and Algorithms (C++),  
EECS 280: Programming and Introductory Data Structures (C++),  
EECS 203: Discrete Mathematics,  
ENGR 101: Programming C++ and MATLAB

## Technical Skills

### PROFICIENT IN

- Python, JavaScript, C++, C, Bash, HTML & CSS, MATLAB

### FAMILIAR WITH

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

## Experience

**SOFTWARE ENGINEER INTERN | NEPHOSITY, INC. | MAY 2014 – AUGUST 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 Bash scripts to manage and run API unit tests and functional tests.
- Worked on the JavaScript-based DICOM medical image dragdrop viewer at [beta.jackimaging.com/demo](https://beta.jackimaging.com/demo), which parses and maps the DICOM files for the JavaScript viewer to display.

**SOFTWARE DEVELOPER INTERN | WIRELESS INFORMATION NETWORK LABORATORY, RUTGERS UNIV. | MAY 2013 – AUGUST 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 | AUGUST 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 [github.com/michiganhackers](https://github.com/michiganhackers).

**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