# Markan S. Patel



## **Education**

## BSE | University of Michigan, Ann Arbor | GPA: 3.596 | Graduating December 2015

Major: Biomedical Engineering, Minors: Computer Science & Electrical Engineering

EECS 281: Data Structures and Algorithms (C++) EECS 203: Discrete Mathematics

# **Technical Skills**

Proficient in: Python, JavaScript, Android, C++, C, Git, HTML/CSS, MATLAB

Familiar with: Java, Ruby, Arduino, Bash, Django, Flask, Node.js, AngularJS, Express, SQL, MongoDB

# **Experience**

# Augmedix, Inc. | Software Engineering Intern | May 2015 - August 2015

Initiated discussion with the CTO for this position to leverage my background and relevant experience. Prepared and presented Google Cloud Messaging feature for Google Glass to senior management and the product team. Collaborated with the engineering team on product design for new releases and independently developed new features and improvements for the core application/platform.

- Repurposed and integrated a deprecated Android Google Cloud Messaging API into Google Glass (since the current version is not supported by Google Glass) to improve the company's mobile device management solution.
- · Created Google Cloud Messaging protocol to send and parse messages to: remotely configure WiFi, sync device with Glassware, and send instant messages to Glass.
- · Improved company's mobile device management solution with Google Cloud Messaging and instantaneous device stat sync.
- · Developed WiFi Android Service that provides details on authentication result, e.g. wrong password, no network found, etc.

## Michigan Hackers | Codebase Manager | September 2014 - Present

- · Developed and maintain open-sourced websites and mobile apps for projects like MHacks and Learn2Hack.
- · Improved students' access to open-sourced tutorials and UMich APIs, available at github.com/michiganhackers.

# Nephosity, Inc. | Software Engineering Intern | 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 Python scripts to manage/run API unit 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.

# Wireless Information Network Lab, Rutgers University | Software Developer Intern | 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**

# Mhacks Website | September 2014 - November 2014

- · Helped build the MHacks V website at mhacks.org using a MEAN stack.
- · Developed the API for iOS and Android apps to use, sanitized user input, and managed unit tests for models.

## Google Glass app, Android App, & Website: where-is-my-child.herokuapp.com | May 2014

- · Made Google Glass app that displays most recent GPS coordinate from the WhereIsMyChild web app on a Glass live card.
- · 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 - Present

- · 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 University of Michigan's Dean of Engineering Honor List, Fall 2013, Winter 2014, Winter 2015 Semesters