Markan S. Patel

markanpatel.me | github.com/cooltoast | markanp@umich.edu

Education

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

- Major: Biomedical Engineering
- Minors: Computer Science & Electrical Engineering
- Relevant Coursework: EECS 281: Data Structures and Algorithms (C++), EECS 280: Programming & Intro Data Structures (C++), ENGR 101: Programming C++ and MATLAB, BME 417: Electrical Biophysics, EECS 451: Digital Signal Processing & Analysis, EECS 203: Discrete Mathematics

Technical Skills

PROFICIENT IN

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

FAMILIAR WITH

- Android, Java, Ruby, Arduino, Bash, Django, Flask, Node.js, AngularJS, Express, SQL, PostgreSQL, MongoDB, jQuery
- Managing source code on GitHub, serving Flask & Django 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 beta.jackimaging.com/demo, 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 github.com/michiganhackers.

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 - 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