Markan Patel

cooltoast.github.io
github.com/cooltoast
markanp(at)umich(dot)edu

Summary

Software Engineer with experience in developing healthcare related technologies using Artificial Intelligence, Augmented Reality, Web/Mobile App Development, and Cloud Native Infrastructure.

Education

Bachelor of Science, University of Michigan, Ann Arbor — Dec 2015

Biomedical Engineering & Computer Science

Technical Skills

Proficient with: Docker, Terraform, Kubernetes, Python, JavaScript, Node.js, React/Redux, SQL, C++, Android, HTML/CSS, Git
Familiar with: Go, Java, Ruby, MATLAB, Arduino, Django, Flask, AngularJS, Express, MongoDB, Vimscript, Lisp

Experience

Senior Software Engineer, Flatiron Health — Jan 2019–Present

Designed and implemented infrastructure workflows that scale with Flatiron's business and technology growth, and developed highly available workflow management platform (based on Apache Airflow) to orchestrate oncology data ETL pipelines—helping accelerate research and improve real world outcomes for cancer patients. Implemented with containerized Python and Go services, and provisioned via Terraform and Ansible. flatiron.com

Software Engineer, PicnicHealth — Aug 2016–Sep 2018

Built human-in-the-loop artificial intelligence platform—which won Google's Machine Learning Startup Competition—to power PicnicHealth's complete medical record data pipeline for better patient experiences and real-world clinical study outcomes. Implemented with containerized Node.js/React web app and Python services, and orchestrated with Kubernetes. picnic.ai

Software Engineering Intern, Augmedix — May–Aug 2015

Designed and built end-to-end Mobile Device Management solution for Augmedix's health record documentation service that streams patient visits via Google Glass wearables to medical scribes. Implemented solution to remotely control and monitor hundreds of Google Glass units, so doctors spend less time charting health records and more time engaging with patients.

Codebase Manager, Michigan Hackers — Sep 2014–May 2015

Developed and maintained open-sourced university related websites and mobile apps. github.com/michiganhackers

Software Engineering Intern, Nephosity — May–Aug 2014

Developed WebGL DICOM medical image viewer and RESTful API with Python Tornado Web Server to manage medical images.

Software Developer Intern, Wireless Information Network Lab, Rutgers University — May–Aug 2013

Created CannyCam, an image detection Python and OpenCV program using Canny Edge Detection and Haar Cascades to isolate and detect anatomical parts. Worked on FaceRecHUD, an Android app using a MOD LIVE Heads Up Display and Android phone to recognize faces from a training set database and display relevant information, e.g. name and age.

Projects

Lost In Translation Twitterbot, Personal Project — Nov 2014–Present

Created a Twitterbot that scrapes famous quotes from goodreads, translates them from English to a random language and then back to English, and finally tweets the almost recognizable result. github.com/cooltoast/LostInTranslationBot

Where Is My Child, Personal Project — May 2014–Present

Tracking a trip with the Google Maps API. Created Android app to send coordinates to Node.js app that stores and displays them using the Google Maps API. github.com/cooltoast/where-is-my-child

Right4Left.com, Personal Project — Dec 2011–Present

Created website with Ruby on Rails to share my experiences learning to play left-handed tennis. github.com/cooltoast/Right4Left