Markan Patel

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

Summary

I organize and unlock data for solving real-world problems, by applying techniques in Artificial Intelligence, Augmented Reality, Web/Mobile App Development, and Cloud Native Infrastructure.

Education

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

Computer Science & Biomedical Engineering

Technical Skills

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

Experience

Senior Software Engineer, Benchling — May 2021–May 2023

Built an end-to-end cloud data platform to accelerate biotech research. benchling.com

CTO, Innovikas LLC — Sep 2018–Present

Managing technical agency focused on pre-seed to Series A startups.

Senior Software Engineer, Flatiron Health — Jul 2020–May 2021

Software Engineer, Flatiron Health — Jan 2019–Jul 2020

Built data platforms and infrastructure to accelerate oncology research and improve real-world outcomes for cancer patients. Designed and implemented Terraform infrastructure workflows to scale with Flatiron's business and technology growth. Developed highly available workflow management platform (with Apache Airflow) to orchestrate oncology data ETL pipelines. Implemented with containerized Python and Go services, and provisioned via Terraform and Ansible in AWS. 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 in GKE. 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.

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

Worked on 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 (name and age).

Projects

Open Source Contributions, Various — Dec 2017–Present

Contributed to Apache Airflow (Python), HashiCorp's Terraform Enterprise Terraform Provider (Go), and ExcelJS (JavaScript).

CannyCam, Personal Project — Jul 2013–Present

Created CannyCam, an open-source image detection Python package using OpenCV Canny Edge Detection and Haar Cascades to isolate and detect anatomical parts. pypi.org/project/cannycam