Matthew Jeng

EDUCATION

University of California, Berkeley

B.S. Electrical Engineering and Computer Science

Coursework: Algorithms, Operating Systems, Computer Architecture, Computer Security, Databases, Machine Learning Organizations: CodeBase (software consulting), Theta Tau (engineering fraternity), Eta Kappa Nu / HKN (EECS honor society) Leadership: Project Manager (CodeBase), Professional Development Chair (Theta Tau), Industrial Relations Chair (HKN)

TECHNICAL SKILLS/TOOLS

Python, Go, Java, C, Hack Proficient: Familiar: React.js, Ruby/Rails, Swift Learning: Shell, Angular

Git. Heroku Docker, AWS, GDB, GCP/Firebase, Apache Spark NGINX, Postgres

WORK EXPERIENCE

Software Engineer Intern (React.js, Hack) – Facebook

- Refactored Marketplace image enhancement code to broaden the module's inputs; unblocked 3 teams using it
- Wrote and ran PHP backfill scripts that enhanced and attached photos to around 40 million Marketplace listings
- Ran an A/B test on the enhancements and conducted metric analysis on the data to verify increased user interaction •
- Added full-stack, cross-platform logging on Marketplace composer for future discovery and A/B testing

Full Stack Project Architect & Manager (Go, React.js) – Pantheon

- Managed a 7 person team in building a unified-service dashboard for easy project management by Pantheon users
- Displayed live data received from GitHub, Jira, and Pantheon webhooks set up through the user authentication flow •
- Designed overall project stack and file structure, then broke the project down into week-by-week tasks for dev teams •
- Provided technical workshops and office hours for developers for Go, Firestore, webhooks/websockets, and ngrok ٠

CS Undergraduate Instructor (Python, C, Go, SQL) – UC Berkeley

- Taught on course staff for the introductory CS (3 semesters) and computer security (1 semester) classes at Berkeley
- Engaged with 50-70 students each semester through labs, discussions, office hours, review sessions, and Piazza •

Application and Systems Engineer Intern (Java) – Prudential

- Developed for Prudential's LINK application, a dashboard that brings together all of Prudential's financial services
- Integrated Spark cluster computing into a batch-update script that syncs data for about one million profiles daily
- Migrated project code to hit new internal endpoints while maintaining backwards compatibility; wrote matching tests

Full Stack Developer (Node.js, Javascript, MySQL) – BetterCloud

- Integrated BetterCloud's platform for creating/executing IT workflows into ServiceNow, an IT management tool
- Enabled high throughput data ingestion by deploying to Google Cloud Platform's serverless architecture
- Used ServiceNow's GlideRecord API to guery and modify the database that contains BetterCloud IT workflows •

PERSONAL PROJECTS

Drive Safe LA (Python, Javascript, GCP) – <u>https://mjeng.github.io/redirect/skrtsafe/</u>

- Best Use of SmartCar API, LAHacks 2019 created an app to help LA drivers visualize the safety of their route
- Analyzed and compressed LA historical traffic data into an ad hoc grid-like data structure for efficient scoring
- Took computed score for each segment of the route and re-rendered the route with a color (safety) gradient

Python Code Visualizer (Python, HTML/CSS) – <u>https://mjeng.github.io/redirect/codevis/</u> November 2018

- · Built a dev tool that graphs function dependencies in Python projects, helping users visualize how their files interact
- Cisco Best API Prize Winner, CalHacks 5.0 integrated tool with Cisco's Webex platform through a custom bot •
- Acted in part as project lead, coming up with the overall design, compartmentalizing work, and assigning tasks

Daily Comic Service (Python, HTML/CSS) – <u>https://mjeng.github.io/redirect/xkcd/</u> February 2018 – June 2018

- Developed a full-stack application that sends comics scraped from https://xkcd.com/ to users daily, through MMS
- Used Twilio to send texts, BeautifulSoup for webscraping, Google Sheets as a database, and Heroku for hosting •
- Deployed an accompanying registration website, served by Flask, that sends form data to the backend/database
- Scales well, with a database soft cap of 500,000 users and with batched requests to avoid hitting GCP rate limits •

Expected Graduation: May 2020 GPA: 3.9 / 4.0

June 2018 – August 2018

August 2018 - December 2018

March 2019

June 2017 – present

May 2019 - August 2019

January 2019 - May 2019