

Margaret Sy

[linkedin.com/in/margaretsy](https://www.linkedin.com/in/margaretsy)

Experience

Software Engineering

- 04/2016– Present **Internal Infrastructure Team, Swift Navigation.**
Centimeter-accurate GPS for autonomous vehicles
- Infrastructure: (AWS, Docker) Deployment and maintenance of data capture and analysis pipeline for firmware performance metrics collection and hardware-in-the-loop testing. Configured development environments for projects and wrote system documentation.
 - Data Analysis: (Python - pandas, numpy) Implement tests for creation of metrics to analyze receiver output as specified by GNSS algorithms and firmware teams.
 - Scripting: (Python) Data capture interfaces for GPS receivers in desktop console and on-site server rack.
 - Web: (ReactJS, Redux) Ported the interface for running test jobs from a fractal of bash scripts to a ReactJS webapp with integration into GitHub workflow.
- 08/2015– **API Team, FLYR, Inc.**
04/2016 Price protection for travel booking
- Develop and support various REST API endpoints used by external partners and internally for airfare price prediction and airfare lock-in products.
 - Maintain software through integrations with domestic and international partners.
- 06/2013– **Data Science Intern, TIER Research Group, UC Berkeley.**
08/2013 Technology and infrastructure for emerging regions
- Used Twitter API to collect tweets from a national power company's customer service feed.
 - Identified tweets containing outage information using a Naive Bayes classifier, parsed and inferred locations of tweets based on unstructured text content.

Academic

- 08/2014– **Tutor, Self-Paced Programming Center, UC Berkeley EECS Department.**
05/2015 ○ Provided feedback on quizzes and guidance for correctness and best practices for projects to students (mostly from outside the CS department) taking the Python course.

Sample Project

- Content-Aware Image Resizing Tool, github.com/margaret/seam-carver.**
- Command-line tool implementation of seam carving algorithm for scaling images.

Education

Class of 2015 **BA, Computer Science, University of California, Berkeley.**

Skills

- Languages: Python (for data analysis, scripting, and web), Bash, Javascript (React), SQL
Services: AWS, Docker, PostgreSQL, Travis CI, Convex, Papertrail
Misc: Git, working in a Linux environment, sprint planning (Agile), documentation writing