

Mark Cerritelli

Languages

Python, SQL, Ruby,
Swift, Objective-C, C

Relevant Technologies & Skills

Flask, Rails, Cocoa,
AWS, Git, Snowflake, New Relic
BDD, Agile, Mentorship
jQuery, HTML, Bootstrap

Education

Carnegie Mellon University
B.S. & M.S.
Electrical & Computer Engineering
Computer Science Minor

Lead Software Engineer

Nike **(was Celect before acquisition)**

February 2019 - Present

Project: Fulfillment (Python API). Uses ML to optimize sourcing recommendations for retail digital orders.
Unofficial technical lead.

Utilizing PostgreSQL, Redis, Flask, Passenger, Okta, Snowflake, Kafka, Docker
AWS, Kubernetes, Aurora, CloudWatch, New Relic.

- Designed / Implemented new features for the API, system integrations, and ETLs.
- Designed integration of various per-request metrics and system state with Snowflake. Leading efforts to analyze snowflake data, and document such analysis. Go-to person for new analysis.
- Improved latency by 40%, allowing the API to meet peak holiday throughput. Using New Relic to find and rank the slower parts of a request, I saw the need to refactor a complicated legacy query, as well as use caching for other specific queries. Designed and implemented both solutions.
- Development of a simulation framework to predict effectiveness of future order recommendations. Guiding intern on effort to expand this framework.
- Designed and developed an Okta authenticating web app front end to allow stakeholders direct control of various system state configurations.
- Wrote script that correlated ingress and app logs to prove high network delay on the client side, which led to a resolution of a high severity incident (while also integrating with a new service, and rolling out a high visibility company initiative).
- Unprompted improvements of team's workflow (such as improving Dockerfile build performance, making sure teammates have access to useful tools, encourage-by-doing better PR process and testing best practices).

Co-Founder

PickACarrot.com

January 2013 - February 2019

Project: PickACarrot (RoR web app). Public tool to help farmers and home gardeners
find seeds and plan their season.

A 2 person startup, I worked with a farmer as the sole developer.

Utilized RoR, PostgreSQL, MongoDB, Elasticsearch, Redis, jQuery, Bootstrap, AWS, Selenium

- Planned, Designed, Implemented, and Tested front & back end. Deployed via Heroku.
- Web scraper, with management dashboard, to collect content from seed catalogs' websites.
- Search Engine with filters
- Custom classification system to accurately identify products.
- Inventory management feature for farmers to organize the seeds for the season.
- Testing scenarios written in Cucumber.

Lead Software Engineer

Medidata Solutions

December 2011 - December 2014

Project: Balance RTMS (RoR web app). Client facing tool for professionals involved in
clinical trials.

Utilized RoR, MySQL, jQuery, Bootstrap, AWS, New Relic

- Agile process. Behavior Driven Development with Cucumber Scenarios.
- Planned / Implemented a range of front and back end features to support study randomization, dosing design, and supply management.
- PR review process in GitHub.
- Led bi-weekly planning meetings & scrums when manager was frequently away.
- Interviewed / Screened candidates for RoR and iOS teams, including a current director of engineering.
- Guided new team members/interns through the process of learning our systems and technologies (including Rails).
- Borrowed by iOS team for 4 months to improve their testing frameworks.

Projects & Interests

iOS App Development. Data Analysis. Wood working. Solving Puzzles. Board games.
Various personal and semi-professional uses of Scikit-learn, TensorFlow, & OR tools.