Nick Titterton

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Experience

Software Engineer, Google July 2019 - May 2021

- Helped design and develop a low cost, eventual consistency, big data storage and batch processing system uStore as part of a team.
- Automated releases using internal Google tools, programmed new features, wrote automated tests, adjusted configurations of a huge distributed system.
- Wrote documentation, architected design and wrote design documents.
- Reviewed my teammates code changes, and monitored the product as part of an oncall rotation.
- Primarily wrote code in C++, also writing in Python, Protocol Buffers, SQL, and JSON-like internal configuration languages.

Software Engineering Intern, ServiceNow May 2018 - August 2018

- Updated AWS EC2/EBS API frameworks from Java to REST-ful Javascript on an Agile/Scrum team.

Education

University of California, Berkeley Fall 2015 - Spring 2019

Bachelor of Arts in Computer Science, GPA 3.46

Coursework:

AI/ML: Artificial Intelligence, Machine Learning, Deep Neural Networks

Theory: Algorithms, Algorithms (Grad), Computational Geometry (Grad), Approximation Algorithms (Grad), Beyond Worst Case Analysis (Grad), Lower Bounds (Grad)

Misc Upper Division: Security, Networking, Operating Systems, Databases, Probability and Random Processes, Computational Photography, CS Ethics

Misc Lower Division: Intro, Data Structures, Computer Architecture, Discrete Math, Electrical Engineering I and II

Projects

Markov Chain Generator Reddit Bot

Wrote, tested, and deployed a reddit bot that scans a user's recent comments and generates a markov chain using Python Reddit API Wrapper (PRAW), AWS EC2, SQS, Lambda, and Cloudwatch.

Low-Distortion Fakcharoenphol-Rao-Talwar Trees

Implemented $O(n^2)$ low-distortion FRT trees, MSTs (Prim's/Kruskal's), and random trees using ReactJS and canvas. Also did distortion analysis using Google Colab and matplotlib.pyplot.

Skills

Languages

Python (numpy, scipy, cvxpy, TensorFlow, scikit, Pytorch, matplotlib), C++, Java, Protocol Buffers, Javascript (React), SQL, HTML, CSS (Bootstrap), Objective-C, C, MIPS, Scheme

Tools & Misc

Test automation, build deployment and monitoring, terminal, git/version control, documentation (incl. LaTeX), distributed systems, AWS (EC2, S3, Lambda, CloudWatch)