STEVEN TRUONG

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EDUCATION

University of California, Los Angeles — October 2020 – Present

Mathematics, Ph.D. (Expected 2025)

- Research interests: functional analysis
- Qualifying exams passed: Basic

University of California, Los Angeles — August 2016 – June 2020

Mathematics of Computation, B.S., and Mathematics, M.A. (dual degree)

- GPA: 3.95 / 4.00
- Honors: Sherwood Prize, Departmental Scholars Program, Departmental Honors, Summa Cum Laude
- Related coursework: Operating Systems Principles, Computer Network Fundamentals

TEACHING

University of California, Los Angeles

- Learning Assistant for Calculus of Several Variables, Winter 2019 (Math 32A), Spring 2019 (Math 32B)
- Learning Assistant for Introduction to Computer Science I (CS 31), Fall 2019

EXPERIENCE

Amazon Devices, Lab126 — June 2020 – September 2020

Software Development Intern

- Wrote both the front-end and the back-end from scratch for a data analysis and visualization tool, which alerted the Alexa team that the data collected from beta testers at the time was too sparse
- Learned and used TypeScript, React.js to build a front-end that uses OpenStreetMap and OSRM to plot customer location data and compare recorded distances to distances of real-world routes
- Wrote the back-end in TypeScript, Node.js, which queries Elasticsearch instances and ingests relevant data

Amazon Web Services, Service Quotas — June 2019 – September 2019

Software Development Intern

- Designed and implemented an API in Java that enables Service Quotas to notify customers of changes to their quota increase requests via AWS CloudTrail
- Wrote thread-safe code for 4 nodes in a distributed system, including AWS Lambda, to call the new API synchronously, which reduced execution times for 3 nodes by eliminating the need to poll for SNS messages
- Modified integration tests to use my new API, which reduced testing and build time by 30%

buckit, a Los Angeles bucket list — April 2019 – December 2019

Back-End Developer

- Refactored the JavaScript code base to use dependency injection, which decoupled business logic from API logic
- Integrated testing libraries and wrote unit tests for all modules

BruinMeet, a UCLA dating app — December 2017 – August 2019

Back-End Developer

- Rewrote the existing notification system to be more modular, which made it easier for the development team to add new notification types and provided an interface for the product team to write the content of notifications
- Wrote a module to store and manage pictures via S3, which allowed users to upload custom profile pictures
- Implemented a new matchmaking algorithm in JavaScript, increasing app usage by giving more users matches

UCLA Atmospheric and Oceanic Sciences — October 2018 – June 2020

Work Study Worker

- Assisted the sysadmin with management and upkeep of the department's Mac lab
- Provided tech support for professors during their lectures and helped students troubleshoot software issues
- Created a new website for the department's new major from scratch and adjusted it based on feedback from faculty members

PROJECTS

PUG Bot, a Discord bot that manages pick-up games — July 2018

Developer

- Written entirely in Python with a modular, object-oriented design
- Increased the ease and efficiency in organizing games in a personal Discord server, encouraging members to participate more often
- Used by several other Discord servers to organize pick-up games for various games

AOS Zodiac, a Google Apps project used by professors to manage boating trips — January 2019

Maintainer

- Refactored and cleaned up the project by removing unnecessary and duplicated code, splitting the code into different components, and making the code more maintainable by organizing code in each component
- Implemented a cron job to remind students of boating trips they signed up for
- Created and modified HTML templates for e-mails, adhering to the department's and school's brand guidelines

LANGUAGES

- LaTeX, C, C++, Java, JavaScript (TypeScript, Node.js, React.js), Python, MATLAB, R, HTML/CSS