STEVEN TRUONG

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EDUCATION

University of California, Los Angeles   October 2020 – Present
Mathematics, Ph.D. (Expected 2025)
> Research interests: functional analysis
> Awards: Edwin W. Pauley Fellowship
> Qualifying exams passed: Basic, Analysis

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

LANGUAGES

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

TEACHING

University of California, Los Angeles
Learning Assistant
> Calculus of Several Variables, Winter 2019 (Math 32A), Spring 2019 (Math 32B)
> Introduction to Computer Science I, Fall 2019 (CS 31)

University of California, Los Angeles
Teaching Assistant
> Integration and Infinite Series, Fall 2020 (Math 31B)
> Calculus of Several Variables, Spring 2021 (Math 32A)
> Real Analysis, Winter 2021 (Math 131A)

EXPERIENCE

Amazon Devices, Lab126   June 2020 – September 2020
Software Development Intern
> Developed data analysis and visualization tools for internal debugging, which alerted the Alexa team that the location data collected from beta testers at the time was too sparse by plotting them on a map
> Built a front-end that uses OpenStreetMap to compare the collected location data to the best fitting real-world route determined by OSRM by visualizing the two paths and calculating their respective lengths
> Wrote a back-end which queries Elasticsearch instances and ingests relevant data
> Used TypeScript, React.js, and Node.js; learned TypeScript and React.js for this project

Amazon Web Services, Service Quotas   June 2019 – September 2019
Software Development Intern
> Designed and implemented an API that updates database entries synchronously and enables Service Quotas to notify customers of changes to their quota increase requests via AWS CloudTrail
> Wrote code for 3 nodes in a distributed system, including AWS Lambda, to call the new API synchronously, which reduced execution times for these nodes by eliminating the need to poll for SNS messages
> Modified integration tests to use this new API, which reduced testing and build time by 30%
> Used Java and Guice; learned both of these for this project

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, increasing app usage by giving more users matches
> Used JavaScript and Node.js; learned Node.js for this project

PROJECTS

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

> 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
> Used Python and the Discord API; learned Python for this project

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

> 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
> Used HTML, CSS, JavaScript