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, algebra

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
Teaching Assistant
- Calculus of Several Variables, Math 32A, Spring 2021
- Real Analysis, Math 131A, Winter 2021
- Integration and Infinite Series, Math 31B, Fall 2020

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

EXPERIENCE

Amazon Devices, Alexa On the Go Experiences June 2021 – September 2021
Software Development Intern
- Collaborated with 5 teams to design and deliver a new Alexa feature that facilitates Whole Foods curbside pickup by proactively prompting a customer and notifying the store when the customer is close to arriving
- Created an AWS CDK application in TypeScript to programmatically provision and configure resources, including Lambda functions triggered by SQS queues and IAM users to distribute read and write permissions
- Designed and implemented an internal Java client to securely deliver serialized customer data to SQS queues

Amazon Devices, Alexa Location Services 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 React 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 with Node.js and TypeScript 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 that updates database entries synchronously and enables Service Quotas to notify customers of changes to their quota increase requests via AWS CloudTrail
- Wrote Java and Guice 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%

BruinMeet, a UCLA dating app
December 2017 – August 2019

Back-End Developer

- Rewrote the team's Node.js notification module to abstract away notification delivery, which simplified the onboarding of new notification types and the modification of the content of messages
- 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

PROJECTS

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

Developer

- Developed a bot with Python and the Discord API that streamlines matchmaking within a Discord server by keeping track of team picks and automatically moving users between voice channels
- Used by several Discord servers to organize matches for games such as Valorant and League of Legends

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