Nicholas Ng

nickng589@berkeley.edu | LinkedIn: www.linkedin.com/in/nickng589
(626) 695-9770 | GitHub: https://github.com/nickng589 | Website: https://nickng589.github.io/

Education

UC Berkeley - GPA 3.7
B.A. in Computer Science | Minor in Data Science **Expected Graduation May 2022**
Relevant Coursework: Data Structures and Algorithms, Structure and Interpretation of Computer Programs, Machine Structures, Designing Information Devices and Systems, Foundations of Data Science, Linear Algebra, Discrete Mathematics, Video Game Design, Computer Security, Operating Systems, Artificial Intelligence, Techniques of Data Science, Database Systems, Efficient Algorithms

Experience

Software Engineer Intern | Thumbtack 06/2021 - 08/2021
- Created an additional step in the booking process to recover customers whose requests are canceled
- Set up and launched the project as an A/B test. It is currently bringing in 7.2% more revenue per unique visitor.
- Implemented Thrift endpoints to connect multiple Golang microservices. Made calls to the microservices asynchronously to ensure responsiveness and efficiency.
- Built a daily run PHP script that queried for customers eligible for an upsell and sent custom notifications, emails, and pushes. Increased usage of the upsell by 0.075% over a 3 month period. Script will continue to run for new upsells and features.

Head Teaching Assistant | UC Berkeley 10/2019 - Present
- Held weekly office hours, labs, and discussions to educate a class of about 300 students in Python and SQL.
- Led teaching staff of 10 other undergraduates to develop course content and organized course logistics.
- Created lesson plans and materials to supplement lecture content with slides and worksheets.

Senior Mentor | Computer Science Mentors 09/2019 - Present
- Built a dynamic website as a part of the tech team which schedules weekly discussions (details in projects section)
- Led weekly meetings with a group of junior mentors to review topics, provide feedback, and mentoring

Projects

Computer Science Mentors Scheduler | React, Django, PostgreSQL 2020 - Present
- Developed website used by 3,000 computer science students each semester to sign up for weekly discussions.
- Implemented functionality to enable mentors to create and manage their discussion section, and students to sign up for mentor's sections.

Econscious : Encourage energy efficient driving | Java, Android Studio Fall 2019
- Utilized SmartDeviceLink API to dynamically obtain and display information on a user's vehicle infotainment system.
- Built an Android app to provide the driver with recommendations on how to drive more energy efficiently.
- Developed functionality to provide feedback on whether the driver is braking or accelerating too aggressively.

Twitter Popularity Tracker | Python, Heroku Spring 2020
- Analyzed the view and subscriber history of a Youtube channel through integrating with the Youtube API.
- Created a Twitter bot to display visualizations on the data gathered and provide predictions on future milestones.

Relational Database Management System | Java Spring 2021
- Implemented core features of a relational database management system including indexing using B+ trees, join algorithms, query optimization, two phase locking for concurrent transactions, and recovery

Skills

Languages: Java, Python, C, Go, GraphQL, PHP, SQL, JavaScript, C#
Frameworks and Technologies: React, Django, PostgreSQL, CSS, HTML, Git, Heroku, Unity, JSON

Awards

Boy Scouts of America, Eagle Scout
2010 - 2017
- Achieved the rank of Eagle Scout. Led and organized different projects for the community including repainting handicap lanes and setting up and reorganizing emergency preparedness rooms at a local elementary school.