Vincent Song

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EDUCATION

University of Virginia, Charlottesville, VA   Expected Graduation: May 2025

Bachelor of Science, Computer Science, GPA 3.796/4.0

- <u>Relevant Coursework</u>: Data Structures & Algorithms 1 + 2, Computer Systems & Organization 1 + 2, Software Development Essentials, Software Testing, Advanced Software Development Techniques, Cybersecurity

West Springfield High School, Springfield, VA   August 2017 - June 2021

- *Advanced Studies Diploma, UW GPA: 3.9, W GPA: 4.5, Honor Roll, AP Scholar Recipient*

WORK EXPERIENCE

Software Engineer | theCourseForum | Charlottesville, VA   September 2023 – Present

- Developed features for theCourseForum website for 1,000+ users, with frontend and backend components, utilizing Python, Django, and Docker. Addressed website issues with GitHub and delivered impactful solutions via pull requests.
- Integrated new SIS API to retrieve course information for 1,500+ courses from all departments to enhance user experience and added proper documentation and testing.
- Participated in weekly meetings, fostering collaboration with the engineering team to compromise and resolve challenges.

Teaching Assistant | University of Virginia | Charlottesville, VA   January 2023 – December 2023

- Created recommendations for online queue system by discussing with professors on improvements and features for the UI to assist TAs in helping students during office hours to manage and clear the queue for busy office hours reaching 50+ capacity.
- Provided personalized feedback for over 500+ students on their assignments and projects, helping them improve their technical and problem-solving skills.
- Collaborated with faculty to create new approaches to teaching challenging concepts and led review sessions, labs, and office hours 6 hours per week to support student learning.

Engineer Intern | Vali Cyber | Charlottesville, VA   June 2023 – July 2023

- Developed an automated Quality Assurance system involving extensive automation of Linux machines via Bash scripting, networking principles, and service administration for over 100+ endpoint security tests.
- Organized the automation of creating/removing enterprise services in Docker and bare metal configurations on testing machines with different Linux versions, ensuring their accessibility to customers while operational.
- Automated administrative actions on Linux servers, emulating real-world business operations, and implemented a robust testing process that ensures services are up, responding as expected, and producing a report on the results, including any false positives, documented in 10+ reports for security improvements.

Website Coordinator Intern / TRTCLE, Inc. / New York, NY   August 2022 – December 2022

- Updated, added, and managed the data input for 1000+ users on the front end for over 60 courses, using HTML.
- Assisted with customer relationship management (CRM) system and team through admin portal.
- Reviewed and analyzed the instructor courses for all 50 states and the information utilized in the system.

SKILLS

- **Languages:** Java, Python, C#, C++, JavaScript, TypeScript, PHP, HTML, CSS, SQL, Bash, Go, R, MATLAB
- **Tools:** Microsoft Office, Git, PostgreSQL, Docker, Heroku, AWS, Azure, Google Cloud Platform, Selenium
- **Frameworks:** Django, .NET Core, React, Next.js, Flask, Ruby on Rails, JUnit 5, Bootstrap, TailwindCSS

PROJECTS

UVA Tour Guide App   September 2023 – December 2023

- Implemented the Google Login & Google Maps API with Python and JavaScript to provide roughly 4,000 first year students with access to location information around grounds for different activities stored in PostgreSQL database, implementing the user interface for both regular users and admins.
- Developed a review system and review ranking algorithm for users to submit reviews and admin users to approve reviews providing separate home screens for both users and providing CRUD functionality and following REST principles.
- Performed Beta testing by having users test the system for final bug fixes and features for the system.
- Served as scrum master for Agile team consisting of 5 members, guiding weekly sprints, and splitting up features into tasks through GitHub issues, deployed project to Heroku with GitHub Actions, and released the software under the MIT license.

Wolfram Alpha Calculator Tester   September 2023 – November 2023

- Created over 40+ unit tests using Input Space Partitioning to test functionality of math operations.

CERTIFICATIONS

- **Microsoft Certified: Azure Fundamentals**, *Microsoft*   August 2022
- **AWS Certified Cloud Practitioner,** *Amazon Web Services (AWS)*   June 2022