Ravi Jayaraman

spy7sw@virginia.edu | ravijayaraman.com | github.com/ravijay301

EDUCATION

University of Virginia • Charlottesville, VA Aug 2021 – May 2025

Bachelor of Science - Computer Science, Mathematics

- Relevant Coursework: Advanced Software Development, Software Analysis, Computer Systems, Algorithms, Compilers, Digital Signal Processing, Math of Derivative Securities, Stochastic Processes, Algebraic Coding Theory.
- GPA: 3.98

WORK EXPERIENCE

Yext • Arlington, VA May 2024 – Aug 2024

Software Engineering Intern

- Worked directly on the **Yext Pages** product, specifically with back-end page generation. Practiced agile/scrum development within a team of 7, working on items towards external sprint goals as well as maintenance. Mainly using **Go** as a development language.
- Consolidated deployment logic and resolved build dependencies, ensuring efficient and reliable system operations for Yext Pages CI/CD platform using **Docker**, **GCP**, and **gRPC**.
- Audited over 200,000 error messages from **Snowflake** to improve error message readability, remove unnecessary alerts, and improve user experience.

Icarus Medical Innovations • Charlottesville, VA June 2023 – Dec 2023

Software Engineering Intern

- Developed and prototyped a sensor brace, integrating Fit Bit technology into our flagship Ascender unloader knee brace. Created a web-based dashboard, empowering patients, and doctors to access real-time data on patient compliance and recovery. This technology allows doctors to obtain up to $130/mo. in RPM code reimbursements per patient.
- Developed an order form for clinicians to directly place orders into our ERP software, allowing orders to be placed up to 1 hour faster.
- Engineered back-end integrations with QuickBooks and Adobe Sign APIs, automating the Invoice and Proof of Delivery forms respectively. Saved up to 15 hours per week for the billing team, minimizing errors, and improving accuracy in order processing.

University of Virginia • Charlottesville, VA Aug 2022 – May 2023

Head Teaching Assistant

- Proctored and led 5 other TAs and 90-students in an introductory computer systems course lab (CS 2130). Introduced students in a variety of topics including binary and bits, assembly, memory and memory management, **C**, and version management.
- Conducted weekly in-person office hours, providing personalized support and guidance to up to 40 students, significantly enhancing their understanding of course material and fostering a positive learning experience.
- Developed rubric criteria for homework assignments and exams ensuring consistent evaluation standards and timely feedback.

PROJECTS

SET - Card Game

- Developed one of my favorite card games from childhood, SET, using **Typescript, React,** and **Vite**.
- Leveraged GitHub-actions to automate build and deployment processes, resulting in quick and hassle-free turnaround from development to production.

CLI Markov Chain Calculator

- Crafted a simple CLI tool in python, automating complex problems involving discrete time Markov Chains.
- Utilized Depth First Search and Strongly Connected Components algorithms to discover communication classes and to determine periodicity.
- Applied linear algebra and stochastic process techniques to solve unique stationary distributions in relevant scenarios.

SKILLS

- **Languages:** Golang, Typescript, HTML, CSS Python, Rust, Java, C/C++, Terraform.
- **Tools:** Git, Nomad, GCP, Kafka, Apache, MySQL, Terraform, gRPC, RabbitMQ, Docker, Bazel.

AWARDS

Winner, UVA Darden Entrepreneurship Cup-Concept Stage October 2023

- Pitched Voy, a volunteer management platform to help non-profits deliver food and medical supplies to those in need. Competed against 30 teams of MBA and undergraduate students.

VTHacks XI – 3rd Place Overall September 2023

- Placed 3rd Overall Against 106 other teams and ~640 individuals at VTHacks, the largest hackathon in the southeastern United States
- Built SmartOH, an improved office hours queue, utilizing **BERT**, **GPT-4**, **React.js**, **Node.js**, **Vite**, and **Express**.