Ajai Upadhyaya

vuq3jw@virginia.edu | (804) 296-8522

www.linkedin.com/in/ajai-upadhyaya

EDUCATION

University of Virginia, 3.77 GPA

Bachelors, CS and Economics

Expected Graduation: **May 2026**

RELEVANT COURSEWORK (*in-progress)

❖ Problem Solving and Programming (**CS 221**)

❖ Object-Oriented Programing (**CS 222**)

❖ Discrete Math and Structures (**CS 208**)

❖ Data Structures and Algorithms I (**CS 3120**)*

TECHNICAL SKILLS

(advanced, proficient)

❖ **Languages**: Java, Python, C++, R

❖ **Front-End**: JavaScript, CSS, HTML

❖ **Back-End**: Flask

❖ **Other**: SQL

INTERESTS

❖ Premier League (Manchester City)

❖ Volunteering

❖ Media Broadcasting

❖ Film Analysis

❖ Graphic Design

PROFESSIONAL EXPERIENCE

Carytown Sound, Richmond Virginia - *Software Eng Intern*

OCT 2022 - MAY 2023 | React, DJango, CSS, Flask
➢ Implemented a secure encryption algorithm using Python, Java, and HTML, ensuring the protection of sensitive media content during distribution and storage.

Specialized Bicycling Components - Fundamental Research Intern

Taiyō.AI, Berkeley, CA – *Software Engineering Intern*
SEPT 2021 - PRESENT | *Full-Stack Software Dev* | DJango, ReactJS, REST

PROJECTS

The Odin Project – Full Stack | Java, HTML, and CSS

➢ Designed intelligent agents for the classic version of Pacman, including ghosts

➢ Implemented both minimax and expectimax search to maximize expected utility and determine optimal moves for agents
➢ Extended alpha-beta pruning metareasoning to multiple minimizer agents for more efficient exploration of the game tree

BearMaps – CS 61B | Java, JavaSpark

➢ Created a web-browser-based Google Maps clone for the UC Berkeley campus, with routing and navigation support
➢ Processed requests from a web API to rasterize location coordinates into a pixel-by-pixel map image
➢ Employed optimized shortest-paths algorithms with intelligent heuristics to provide turn-by-turn directions

EXTRACURRICULAR ACTIVITIES

Math Central Tutoring

OCT 2021 - MAY 2023 | *CS 208 / MTH 264 Math Central*

➢ Conducted both one-on-one and group tutoring sessions for students enrolled in high-level math and computer science courses
➢ Strengthened personal connection to students and teaching ability to relay through teaching.

The Odin Project

MARCH 2023 - MAY 2023

➢ Completed The Odin Project's Full Stack JavaScript path, a comprehensive and rigorous curriculum covering front-end and back-end web development using JavaScript.

➢ Developed proficiency in popular JavaScript frameworks and libraries, such as React and Node.js, for building scalable and efficient web applications.

Carytown Sound

JAN 2023 - PRESENT | Retail *Startup , Software Developer*

➢ Contributed to the creation of media broadcasting software applications utilized by customers and staff during day-day operations.

➢ Worked alongside full stack developers to create and upkeep web based API

AWARDS AND CERTIFICATES

- ❖ Skydeck Accelerating Cate

- ❖ Upsilon Pi Epsilon (top 30% of CS students)
- ❖ Google Data Analytics

Professional Certificate*

he Sipher Company, Berkeley, CA – *Software Engineering Intern*

MAY 2021 - AUG 2021 | *Full-Stack Software Dev* | ReactJS, Flask, MongoDB, AWS ➢ *Login / Signup Modal*
○ Created a concept-to-product login and signup modal to allow users to create and log into accounts
○ Employed BCrypt password hashing, SQL injection prevention, and input sanitization to protect against malicious attacks
➢ *Amazon Web Services Integration*

○ Migrated storage and analytics services of the organization to AWS Cloud ○ Employed systems-design best practices to provide an efficient and scalable solution for the organization