

EDUCATION

Virginia Tech

M.S. Thesis Computer Science & Applications, GPA: 4.0

Expected May 2025

B.S. Computer Science, GPA: 3.88

August 2021 – May 2024

Relevant Coursework: Data Structures & Algorithms, Web Application Development, Computer Systems

PROJECTS

Gemini API Developer Competition, Google

May 2024 – June 2024

- Created an AI-powered word guessing game that reached 3000 users
- Developed with Gemini API, React JS, Python, and PostgreSQL (<https://github.com/tbux408/gemini-competition>)

AI Chatbot, Senior Capstone

January 2024 – May 2024

- Led 5 person team and collaborated with client to develop AI chatbot to combat obesity and type 2 diabetes
- Integrated Llama and OpenAI LLMs to facilitate cue text generation for 100 users (<https://eft.cs.vt.edu>)

Ride Share Web Application, Personal Project

December 2023 – January 2024

- Developed a designated driver application with 60 users to match students with drivers
- Crafted a queue management system in Python that processed up to 200 ride requests per hour

Personalized Bookstore, Project for CS5255 Web Application Development

August 2023 – December 2023

- Developed a bookstore application using VUE.js, HTML, and CSS that allows users to browse and purchase books
- Implemented backend service with Java and MySQL to handle up to 1000 user transactions per minute

RELEVANT EXPERIENCE

Software Engineer Intern, FedEx, Remote

June 2024 – August 2024

- Contributed to an Android mobile application used by over 50,000 drivers for pickup and delivery
- Gained experience with the agile software development process by attending daily standups, creating and completing stories, and participating in sprint planning, refinement, and retrospectives

Undergraduate Research Assistant, Blacksburg, VA

January 2023 – May 2024

- Analyzed 957 students' data using Python and Matplotlib to publish a paper in *FIE 2024 conference*
- Enhanced usability and added authentication workflow to React web application used to interactively teach command line and Git skills to Computer Science students (<https://visualizations.endeavour.cs.vt.edu/>)
- Created backend used by instructors and students to manage classes and exercises

Graduate & Undergraduate Teaching Assistant, Blacksburg, VA

August 2022 – Present

- Worked as a TA for Software Design (CS 1114), Data Structures (CS 2114), and Comparative Languages (CS 3304)
- Improved leadership and communication skills by instructing labs of about 30 students

Software Engineer Intern, FedEx, Remote

June 2023 – August 2023

- Developed web application using Angular and TypeScript that communicated with enterprise REST APIs to reroute packages, reducing time spent rerouting packages by 50%
- Led biweekly demos for team members and presented final application to company vice presidents

CEED Peer Mentor, Blacksburg, VA

July 2022 – December 2022

- Mentored 9 first year engineering students by conducting weekly meetings
- Instructed over 120 high schoolers on a variety of engineering concepts

SKILLS

Languages: Python, Java, TypeScript, JavaScript, HTML, CSS

Technologies: React, Docker, NPM, Kubernetes, Spring Boot, Gradle, REST, Angular, Vue.js

HONORS & SOCIETIES

Honors: Dean's List with Distinction (Fall 2021 – Spring 2024), President's List (Fall 2023 – Spring 2024)

Societies: Lambda Chi Alpha, Phi Beta Kappa