

EDUCATION

University of Vermont, Burlington, VT

- Accelerated M.S. in Computer Science (May 2025), **GPA: 3.84**
- B.S. in Computer Science (May 2024), **GPA 3.89**
Ranked: 29 / 324
Dean's List: All Semesters

Relevant Coursework: Data Structures and Algorithms, Algorithm Design and Analysis, Operating Systems, Software Engineering, Evolutionary Robotics, Machine Learning, Computer Organization and Architecture, Network Security and Cryptography

TECHNICAL SKILLS

Programming Languages: Python (Expert), C/C++ (Expert), Java (Proficient), C#

Frameworks & Tools: Tensorflow, PyTorch, Flask, RESTful APIs, Git (Github, Gitlab), CI/CD

Web: JavaScript, HTML5, CSS3, Bootstrap

Cloud & Database: AWS, Firebase, MySQL, SQLite, SQL server

Operating System: Windows Systems

Other: Agile Development, Software Testing, Object-Oriented Design

WORK EXPERIENCE

Graduate Teacher Assistantship, University of Vermont, USA

August 2024 - May 2025

- Co-designed and currently teach an Intro to Databases course, covering SQL, design theory, and web integration.
- Developed rubrics, lab activities, and debugged Java and Python projects to support student understanding.
- Coached 60+ students, leading to a 90% satisfaction rate and significant gains in project quality and comprehension.

STEM Ambassador, University of Vermont, USA

September 2021 - May 2025

- Taught over 400 K–12 students in 30+ Vermont schools about programming, robotics, and STEM careers.
- Designed and delivered semester-long robotics curriculums using LEGO EV3 and Java.
- Organized end-of-term workshops where students demonstrated hands-on robotic builds.
- Aided in grant proposals that secured funding to expand the program into summer sessions across rural VT.
- Represented UVM in the Engineering Ambassador Network to promote diversity and access in STEM education.

Undergraduate Teaching Assistant, University of Vermont, USA

September 2022 - May 2024

- Instructed 200+ students across Data Structures, Python, Java, C++, and Software Engineering.
- Created new labs and co-wrote a curriculum for an applied Databases course.

PROJECT WORK/ASSIGNMENTS

Differentially Private Quantile Algorithms Analysis | Python, Algorithm Design An

September 2024 - Present

- Conducted comparative research on evaluating runtime, accuracy, and efficiency of differentially private quantile algorithms
- Benchmarked multiple algorithms, revealing performance differences and optimizing usage cases overlooked in previous studies
- Provided actionable insights to aid in algorithm selection based on use case and performance trade-offs

Food Audio Classification Model | Python, Flask, Pytorch

September 2024 - December 2024

- Developed a machine learning model for food audio classification to complement a visual recognition system
- Leveraged PyTorch to extract key audio features, achieving 85% accuracy in food sound classification
- Implemented CI/CD pipeline for iterative testing and continuous integration, reducing classification errors by 20% and accelerating model deployment

AI-Powered Chess Game | Python, Git, Agile Software Development

January 2024 - May 2024

- Created a chess game with AI-driven decision-making using the minimax algorithm, enhancing gameplay complexity
- Designed a scalable and maintainable codebase using object-oriented principles, optimizing long-term development and feature expansion
- Led an agile team, utilizing Git for version control and iterative development to ensure seamless integration and rapid deployment

Real-time Task Management App | Swift, Google API, Firebase, User-Interface Development

September 2023 - December 2023

- Led a 4-person agile team to develop a full-stack app with Firebase Authentication and Cloud Messaging for roommate/household organization
- Integrated cloud services for real-time sync and notifications, achieving 95% test coverage with unit and integration testing
- Implemented secure user authentication and real-time updates, resulting in a highly responsive and reliable application

ACADEMIC AWARDS

- Computer Science Special Recognition Award** | Spring 2025, Spring 2024

Awarded for exceptional commitment to student success and departmental excellence, serving as a Teaching Assistant in all core courses and providing ongoing academic and logistical support to faculty and peers

VOLUNTEER EXPERIENCE

FIRST Robotics Volunteer Coordinator & Judge | DEI Committee Student Representative | Girls Who Code Volunteer