R. Davis Haden

Education

Georgia Institute of Technology, Atlanta, GA

Bachelor of Science in Computer Science (AI & HCI)

Honors: Faculty Honors (4.0 GPA, 2024) & Dean's List (Fall 2023)

The Lovett School, Atlanta, GA

May 2023

GPA: 3.87/4.0

High School Diploma with Distinction

GPA: 98.73/100 SAT: 1530

Expected Graduation: May 2027

Honors: Cum Laude Society, National Honors Society, Yale Book Award, Engineering Award, Burke Whitman Service

Award

Projects

Spotify API & Student Scheduler Apps

• Developed both the back-end and front-end for a student scheduling app and a Spotify Wrapped-inspired application using Android Studio. Integrated Spotify's Web API for dynamic user data visualization and employed Firebase for efficient data storage and retrieval. Led a team of six using Agile methodologies (Scrum, Trello) over a three-month project cycle.

Robotics & AI Projects

• Implemented Kalman and Particle Filters to accurately localize moving objects, achieving over 90% accuracy in testing. Designed and applied A* search algorithms for optimal pathfinding and incorporated policy maps to enhance robot navigation. Utilized PID control for smooth autonomous corrections and integrated SLAM algorithms for robust multidimensional movement.

Work Experience

HelloPackage-Intern

Summers 2022 & 2023

• Created engaging social media content (LinkedIn posts, TikTok videos, Instagram graphics) using Final Cut Pro X and Adobe InDesign. Researched and implemented best practices that increased viewer interaction threefold. Designed over 10 templates and established streamlined workflows for company publicity.

Code Ninjas – Team Member/Sensei

Summer 2021

• Taught coding classes and camps to 30+ children (ages 6-13) using Unity, JavaScript, Java, and Python. Developed interactive projects and engaging learning activities to foster interest in coding.

Leadership

Theta Chi Fraternity – Executive Recruitment Chair

 $2025\ Spring\ \ \ Fall$

• Orchestrated recruitment strategies at Georgia Tech, contributing to the successful recruitment of 30+ new members. Organized recruitment events, formal rush activities, and summer programming. Maintained detailed event records.

Student Service Board - President

Senior Year

• Led a leadership board of 16 students and coordinated with a larger group of over 40, successfully doubling fundraiser income.

Technical Skills & Personal Interests

Programming Languages: Java, Python (NumPy, OpenCV, SciPy), JavaScript, C, SQL, HTML/CSS

Frameworks & Tools: Android Studio, Firebase, React Native, React.js, Trello

Concepts & Algorithms: Data Structures, Kalman Filters, Particle Filters, A* Search, PID Control, SLAM

Interests: Rock Climbing, Hiking, Piano, Reading (Science Fiction), Travel