

Will Savage

Arlington, VA | wsavage6316@gmail.com | github.com/ws-kj | 703-439-7983 | US Citizen

Student with a demonstrated history in applied AI/ML systems, full-stack web development, and more.

Education

Massachusetts Institute of Technology (2024-present)

Candidate for Bachelor of Science (B.S.) in Electrical Engineering and Computer Science, expected May 2028

H-B Woodlawn Secondary Program (2020-2024)

High School Diploma, GPA: 4.3, SAT: 1600/1600

Activities - International Science and Engineering Fair finalist, eagle scout, varsity rowing team captain

Relevant Coursework - Multivariable Calculus, AP Calculus BC, AP Physics C: Mechanics, AP Chemistry

Skills

Languages: C, C++, C#, Java, Python, Rust, Go, JS/React, HTML/CSS

Tools: Git, *nix scripting, SQL, CMake, Azure, AWS, GDB, Valgrind

Domains: Computer vision, Machine learning, LLMs, Full-stack web, OS design

Work Experience

Parsons Corporation (Summer 2023 internship) - Worked with a small team to develop ParsonsGPT, a web interface for Parsons employees to securely interact with GPT and other LLMs. Implemented advanced LLM features such as agents, self-ask chaining, vector embeddings, and document retrieval. Developed a web application with C#/ASP.NET and React that leveraged resources in the Azure cloud including PostgreSQL, Cognitive Search, and Azure App Service to ensure scalability. Internally deployed the application to 100+ users, including senior management.

Jefferson Lab National Accelerator Facility (Summer 2022 internship) - Worked with senior engineers and scientists to design and build Spectreye, a novel system for calibrating high momentum spectrometers in the lab's particle accelerator. Utilized OpenCV, Tesseract, and a variety of deep-learning based OCR solutions. Packaged and distributed the final program as a C++ library for use in the lab's codebase.

Arlington Public Schools (Summer 2022) - Worked as assistant teacher for a summer school course preparing students for AP Computer Science. Effectively communicated computer science concepts to students while collaborating with the primary teacher to design and execute lesson plans.

Personal Projects

Orpheus (2024) - Built an interpreted programming language with features including gradual typing, monadic types, and first class functions. Implemented lexer, parser, and evaluator from scratch in both Python and C++.

Orphic (2023) - Built an open-source CLI tool in Rust that uses GPT to translate complex tasks into a series of shell commands to be executed on the system with over 250 users.

Pupil-Controlled Vehicle (2021-2022) - Led a small team in designing and building a novel eye-tracking input system for controlling vehicles. Used OpenCV, Python, 3D printing, HTTP sockets, and other technologies. Selected as a finalist project for the 2022 International Science and Engineering Fair.

xsnip (2021-2022) - Built an open-source screenshot program for X11 in C. Rapidly implemented and improved features based on community feedback while ensuring memory safety and system compatibility.

H-B Woodlawn Arena Scheduling (2021-2023) - Maintained and upgraded a web application used by my high school to generate student schedules and class rosters for 800+ students a year. Deployed and scaled with AWS.

wOS (2019-2020) - Built a 64 bit hobby operating system in Rust, featuring higher half paging, multicore support, a variety of hardware drivers, and a completely homegrown filesystem.