Sam Mayle

Samuel B. Mayle, Cambridge MA

+1 (617)-710-4303
sam@mayle.com
27smayle@cpsd.us

US Citizen

Skills

Programming Languages: Python, HTML, CSS, React, Java

Operating Systems: Mac OS, Windows 10/11/2022, Linux, Kali Linux

Projects

Building a Class Rating System

May 2025 - PRESENT, Cambridge MA

An issue I faced as I was trying to pick classes for the school year was deciding which ones were good. To solve this problem, I am building a full-stack web application for students to rate and review classes. This project involves designing a database to store student reviews and logins, and developing a backend API. I am gaining practical experience in designing a scalable system and software development.

Building a Better Grade Viewer

September 2023 - September 2025, Cambridge MA

At CRLS there has been a project since 2019 to make the website to view grades look more beautiful. I have helped in this effort on my own, unfortunately there were new guidelines for logins preventing the site from running how it once did.

Building an E-Bike

June 2023 - August 2023, Jackson WY

During the summer I love to bike around, and I took a trip to Wyoming where locations are more spread out than Cambridge. In order to get around faster and reduce my environmental impact I worked on creating an Electric Bike. This was made from old stuff that I found at MIT Swapfest and flea markets, challenging me to work with what I had.

Building a Graphics Card

January 2023 - September 2024, Winchester MA

I worked on this with my friend Iosif and had completed the solderless breadboard by September of 2023 based on the schematics of Ben Eater. This project required trial and error and lots of organization. I wanted to do more with this project and breadboard the full computer, however I stopped at the start of high school. .

Building a Synthesizer

September 2022 - January 2023, Winchester MA

As part of this project, I looked into analog synthesizers and the evolution of electronic music. I settled on building a portable digital synthesizer based off a MIDI keyboard that I found. I used a Raspberry Pi running a modified version of Fluidsynth, an open source synthesizer software. This project was relatively quick and interesting and helped me learn more about how to integrate hardware and software.

Researching Cyber-Security

September 2021 - June 2022, Winchester MA

I did research into Kali Linux, Virtual Machines, Botnets and Network Monitoring. As part of this project my colleague and I set up a Tor Relay system and I started doing Capture The Flags as well as starting to do bug bounties on Bugcrowd and HackerOne. This project really kicked off my interest in computer science and specifically cybersecurity itself.

Education

Cambridge Rindge and Latin School (CRLS) / Junior (11th)

2023-2027, Cambridge MA

Courses: Ec10B at Harvard College, CS20 at Harvard Extension School, AP Chemistry, AP Computer Science Principles, AP Computer Science Applications, AP Calculus BC, AP U.S. History, and Multivariable Calculus. I am currently taking: AP Biology, CS2, Chinese 3, Harvard Extension School Math21B, and Harvard Law School JEWISHST 209.

The Acera School / Graduate

2017 - 2023, Winchester MA

Community Engagement

Mitsubishi Electric Research Labs, Intern

January 2026 - PRESENT, Cambridge MA

Cambridge Community Seder, Leader

Spring 2024 & 2025, Cambridge MA

Camp Yavneh, CIT

Summer 2025, Northwood NH

Cambridge School Volunteers, Tutor

2023 - 2025, Cambridge MA

Current Endeavors

At the Cambridge Rindge and Latin School (CRLS) I have had the opportunity to join many clubs and take many interesting courses. I am involved with many clubs, Chemistry Olympiad Club, Math Club, and CS Club. I also lead the Investment club which has over 15 consistently coming members where we discuss market, trade, economics, and investment strategy. I have been going to a Jewish Camp in New Hampshire for most of the summer during the past 5 years. I also play tennis, squash and frisbee during the year.