

Ayush Kumar

 [github/ayukmr](https://github.com/ayukmr)

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 ayukmr.com

PROFILE

10th grade developer with skills in full-stack development, machine learning and command-line tooling. Youngest-ever Apple WWDC scholarship winner at 10 years old. Vim enthusiast.


EDUCATION

- The Nueva School / Software Engineering, Advanced ML, Intro ML, Math 3, Intro Physics 2015 - Present
- Stanford Pre-Collegiate Studies / Product Design 2024
- Inspirit AI Pioneers, Inspirit AI Scholars / High School Level 2022, 2021

EXPERIENCE


Founder & CEO / Octalwise LLC

2022 - Present

Software company publishing apps on the App Store, including Tracks (iOS app) and Acidity (extension).  octalwise.com


Full-Stack Intern / Dragonfruit AI

React, Flutter / 2024

Developed the Dragonfruit mobile app using both React and Flutter. Managed distribution of the app through the Google Play Store.  dragonfruit.ai

ML & Frontend Intern / Dragonfruit AI

Python, React / 2023

Implemented frontend and backend components for general object filtering on camera feeds using OwlVIT, an optimized object detection model.  dragonfruit.ai

Robot Programmer / FRC Team 4904


Java / 2023 - Present

Worked as a key programmer on the 4904 FRC team at The Nueva School, writing the Java code that is run on the robot.

PROJECTS


Tracks / Octalwise

Swift, Crystal

Developed and published iOS app for monitoring live Caltrain timings through the API. Wrote server in Crystal for caching API responses for the app. Available on iOS in the App Store.  octalwise.com/tracks


Acidity / Octalwise

JavaScript, HTML/CSS

Developed Safari extension for navigating to archived versions of pages using archive.ph. Published to the App Store and available on macOS, iOS, and iPadOS.  octalwise.com/acidity


Glaze

Ruby, LLVM

Created compiler for a new language created with the goal of learning how to use LLVM. Ruby bindings to LLVM are used to generate the LLVM IR and compile programs to machine code.  ayukmr/glaze

ToDoBox

Python, React

Created todo app with support for descriptions, sections, dates, and more. Uses a React webapp for the frontend and a Python server using Firebase for data storage and authentication.  ayukmr/todobox-webapp

ayukmr/poplar

Simple x86 operating system with kernel written in C.

Assembly, C

ayukmr/nn

From-scratch deep learning library implementing backprop.

Rust

ayukmr/ftc-2023

FTC robot code written as the sole programmer of a 10-member team.

Java

ayukmr/dotfiles

Personal dotfiles for various tools including vim, zsh, tmux, and git.

Various

SKILLS

Languages

- Advanced: Rust, Python, JS, HTML/CSS, Ruby, Swift, Crystal, SQL, VimL, ZSH
- Knowledge: C, C++, C#, Clojure, Dart, Java, Go, Lua, NASM

Libraries & Tooling

- Advanced: Git, Vim, tmux, SQLite, Firebase, React, Flask
- Knowledge: Flutter, WASM, LLVM, WGPU, Unity

Interests

- Electric guitar, blogging, ultimate frisbee, rock climbing

AWARDS

- Silver Level / USACO 2023 / 9th
- WWDC Student Scholarship / Apple 2019 / 4th
- Best Presentation / Inspirit AI 2022 / 7th
- Third Place / GG STEM Fair (2024), Second Place / San Mateo STEM Fair (2020)