

Technical Experience

升级 (sheng ji) Display March — September 2024
Solo Developer

- Created a cross-platform mobile app showing everyone at a table key information about an ongoing round of 升级 (sheng ji), a family of classic Chinese card games that bring people together.
- 升级 Display works on Android, Windows, Linux, and the web using Compose Multiplatform, and is responsive to screen size, so players can use the app on any phone or tablet.
- Developed a website using Astro with Svelte, featuring complex scroll-based animations, to showcase the app's features.

FIRST Robotics Competition Team 1678: Citrus Circuits August 2021 — June 2024
Software Scouting Front-End Developer

- Led design and implementation of Android and desktop apps using the Kotlin programming language for a world-leading FRC robot scouting system, contributing significantly to the team winning its world championship division in 2022-2024.
- Wrote whitepaper on the scouting system's architecture and design, and publicly released the source code.
- Headed a team of counselors at Davis Youth Robotics RoboCamps, a summer camp serving students through 8th grade.
- Led the Shelter Finder outreach project, collaborating with community members and developing a web app to help police officers in the local community locate available homeless shelters for those in need.

scadnano June 2022 — Present
Software Engineering Intern under Prof. David Doty, UC Davis Molecular Computing

- Conducted software-based research on DNA nanotechnology by developing a web app, written in the Dart programming language using React and Redux, to help researchers design synthetic DNA nanostructures.

Android App Template September — November 2023
Solo Developer

- Created a GitHub template for creating Android apps with a useful base of libraries and plugins.
- When using the template, developers can put their app's name in the GitHub repo description, and a GitHub Action inserts the app name into the correct places and cleans up the project.

Computing Skills

Languages	Kotlin, Python, Java, C++, XML, YAML, TOML, HTML, CSS, JavaScript, TypeScript, React, Vue, Svelte, Astro, Dart, LaTeX, Markdown, Typst
Operating Systems	Linux (KDE Neon, Kubuntu), Windows 10/11, Android
Tooling	Git, GitHub (Issues, PRs, Actions, Pages, Wikis, CLI), Renovate, Cloudflare (Pages, Workers, Domains, Wrangler), npm, Yarn, pnpm, Tailwind CSS, Redux, Vite, Vercel, Zsh, Alacritty, Jetpack Compose, Compose Multiplatform, Google Workspace, Google Apps Script, Android Studio, adb, IntelliJ IDEA, Visual Studio Code, Kate, asdf, zoxide
Other Software	Firefox, Thunderbird, Tailscale, GIMP, Inkscape, Discord (Vencord, Powercord, Aliucord, Vendetta), Slack, Obsidian, Kdenlive, F-Droid

Education

University of California, Santa Barbara — Class of 2028, College of Creative Studies Computing 2024 — Present

- Relevant Courses: Computer Programming and Organization I, Computer Science Lab, Quantum Computing Fundamentals, Linear Algebra with Applications

Davis Senior High School, Davis, CA — GPA (unweighted): 3.96 2021 — 2024

- Relevant Courses: AP Calculus AB, AP Calculus BC, AP Chemistry, AP Physics, AP Biology, Advanced Robotics Honors, AP U.S. History, AP English Literature and Composition, AP U.S. Government, AP Macroeconomics
- Self-Studied AP Courses: Computer Science A, Physics C: Mechanics, Statistics, English Language and Composition
- Dual Enrollment Courses: Calculus III
- Clubs: Davis Coding Club (VP, Project Organizer), DHS Mu Alpha Theta Math Club (VP, Website Lead)

Summer Programs — Michigan Math and Science Scholars, Summer STEM Institute, AwesomeMath Summer Program