(510) 579-4552
Davis, CA
edwinchang2024@gmail.com

Edwin Chang

GitHub/EdwinChang24

I'm a high school senior with a keen interest in computer science and technology, and how they can influence our society's future.

EDUCATION

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:** AP Computer Science A, AP Physics C: Mechanics, AP Statistics, AP English Language and Composition

- **Dual Enrollment Courses:** Calculus III

Michigan Math and Science Scholars — Mathematics of Decisions, Elections, and Games   **Summer 2023**

Summer STEM Institute — Conducting Data Science Research, Programming for Data Science   **Summer 2021**

AwesomeMath Summer Program — Number Theory   **Summer 2020**

TECHNICAL EXPERIENCE

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.
- Trained newer members on maintaining and developing the scouting system.
- Wrote whitepaper on the scouting system's architecture and design, and publicly released the source code for other teams to use.
- Was a key participant in the team's competitive strategy discussions and alliance selections.
- Contributed significantly to the team winning its division at the *FIRST* World Championship in both 2022 and 2023.
- Led the Shelter Finder outreach project, developing a web app to help police officers in the local community locate available homeless shelters for those in need.
- Oversaw Shelter Finder development and collaborated with community members.

UC Davis Molecular Computing   **June 2022 — Present**

Software Engineering Intern under Professor Dave Doty

- Conducted software-based research on DNA nanotechnology by developing the web app scadnano, a tool for designing synthetic DNA nanostructures.
- Used the Dart programming language with React Redux.

Personal Projects

- **Salvage:** An Android app written in Kotlin for bookmarking and organizing links.
- **Previewception:** A Kotlin library for previewing Jetpack Compose UI components with different arguments.
- **Android App Template:** A template for Android apps with a scalable architecture, self-populating the app metadata when used.
- **Peruse:** An Android app for browsing Hacker News.
- **School Schedule:** An Android app for viewing a school's bell schedule.

VOLUNTEERING/LEADERSHIP

Davis Coding Club   **August 2021 — June 2024**

Vice President — Project Organizer

- Taught at Python and Java workshops for elementary school students.

- Wrote problems for and organized the Davis Coding Tournament in 2022 and 2023 for elementary and middle school students.

Davis Youth Robotics RoboCamps   **Summer 2022, 2023**
Head Counselor
- Led team of counselors at summer camp hosted by Citrus Circuits.
- Taught students through 8th grade teamwork through building and programming VEX IQ robots.

DSHS Mu Alpha Theta Math Club   **August 2021 — June 2024**
Vice President — Website Lead
- Wrote problems for and organized the Davis Math Tournament in 2022, 2023, and 2024.

COMPUTING SKILLS

Languages	Python, Java (USACO Silver), Kotlin, C++, Rust, XML, HTML, CSS, JavaScript, TypeScript, Dart, LaTeX, Markdown, Typst
Frameworks/OS	Linux, Windows, Android, Jetpack Compose, Compose Multiplatform, Google Apps Script, Manim
Other Programs/Software	Git, GitHub, Zsh, JetBrains IDEs, Visual Studio Code, Tailscale

EXTRACURRICULARS

Boy Scouts Troop 139 Davis
- Patrol Leader
- Star Rank
- Community service participation: Scouting for Food, Christmas tree lot, city event cleanups, regional park maintenance
- Summer camps

Flute
- Music Teachers' Association of California Certificate of Merit Level 9
- Davis Youth Flute Choir (2018—2024): annual summer/winter camps
- Concerts: retirement community performances, holiday performances in parks

Sports
- Tennis — Davis Senior High School Junior Varsity Team (Spring 2021, 2022)
- Cross Country — Davis Senior High School Frosh/Soph Team (Fall 2021)
- Swim — recreational

Family Responsibilities
- Dog walking
- Laundry, garbage, house cleaning
- Yard work

Hobbies
- Biking
- Running
- Photography
- Singing
- Reading