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 - Present

- 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 Physics C: Electricity and Magnetism (to be taken), AP Statistics, AP English Language and Composition
- Dual Enrollment Courses: Calculus III

Michigan Math and Science Scholars — Mathematics of Decisions, Elections, and GamesSummer 2023Summer STEM Institute — Conducting Data Science Research, Programming for Data ScienceSummer 2021AwesomeMath Summer Program — Number TheorySummer 2020

TECHNICAL EXPERIENCE

FIRST Robotics Competition Team 1678: Citrus Circuits

August 2021 — Present

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.
- Wrote whitepaper on the scouting system's architecture and design, and publicly released the source code for other teams to use.
- 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. 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 written in the Dart programming language using React Redux helping researchers design synthetic DNA nanostructures.

VOLUNTEERING/LEADERSHIP

Davis Coding Club

August 2021 — Present

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 — Present

Vice President — Website Lead

Wrote problems for and organized the Davis Math Tournament in 2022 and 2023.

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 — Star Rank, Patrol Leader, attended summer camps, participated in community service events

Flute — Music Teachers' Association of California Certificate of Merit Level 9, member of Davis Youth Flute Choir (2018—)

Sports — Tennis (DSHS Junior Varsity Team), Cross Country (DSHS Frosh/Soph Team), Swim (recreational)