# **Audrey Wiebe**

661.331.9489 • awiebe@usc.edu • <u>audreywiebe.github.io/portfolio</u>

## **EDUCATION**

University of Southern California | Major: Astronautical Engineering | Class of 2028

## Bakersfield High School | GPA: 4.00

- Project Lead the Way Engineering Pathway | President, Society of Women Engineers | SWENext High School Leadership Academy
- Relevant Coursework: Principles of Engineering, Aerospace Engineering, Digital Electronics, AP Physics 1, AP Computer Science Principles

#### **EXPERIENCE**

# **Enterprise Development Extern**

June - August 2024

Kern Health Systems | Bakersfield, CA

Handled healthcare data within Microsoft SQL Server Integration Services, gaining development experience with SQL. Practiced Agile Development Lifecycle within Enterprise Development, preparing for and attending daily Scrum meetings. Collaborated with database administrators to identify and clear outdated data. Assisted with processing medical claims through Electronic Data Interchange team, gaining Microsoft Excel experience.

#### Digital Logic Voting Circuit Project

January - February 2024

Digital Electronics Course

Designed digital logic circuit to take four voting inputs and output results of theoretical election. Simulated circuit in Multisim and simplified logic expression using Boolean algebra operations. Documented truth table, design, and simulation notes in engineering notebook. Collaborated with another student to build circuit on myDAQ board using combinations of AND, OR, Inverter, NAND, and NOR logic chips.

#### iOS Mobile App Development Scholar

June 2023

Kode With Klossy Virtual Summer Camp

Learned Swift programming language and gained experience pushing and pulling projects through GitHub. Collaborated with a project group to brainstorm and create a wireframe for iOS mobile app. Developed functional mobile app in Xcode providing users with climate change information and a carbon footprint calculator quiz. Participated in team building exercises with diverse groups and discussed the future of technology.

# Airfoil Redesign Project

October - November 2022

Aerospace Engineering Course

Collaborated with one other student, researching airfoil and weight of Zlín Z 42 aircraft. Used FoilSim to simulate original airfoil and modify angle of attack, thickness, and camber to adjust aircraft lift. Produced simulated airfoil with the same lift as aircraft weight and larger L/D ratio than original airfoil. Discussed air flow principles over wing with the new airfoil. Documented all sketches and simulation results in engineering notebook.

## **SKILLS**

Group Collaboration | Microsoft SSIS | Engineering Project Documentation | Multisim Experience | Communication | iOS App Development | Swift and Swift UI Experience | Xcode and GitHub Experience | Student Leadership | Microsoft Office Suite & Ecosystem | Organization | Agile SDLC Methodology | SQL