Audrey Wiebe

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EDUCATION

University of Southern California, Viterbi School of Engineering May 2028
Bachelor of Science, Astronautical Engineering GPA: 3.86/4.00

SKILLS

Languages/Tools: MATLAB, Python, SQL, Agile SDLC Methodologies, Microsoft Excel, Multisim, Swift, Xcode, GitHub
Soft Skills: Teamwork, Communication, Strategy Formulation, Adaptability, Flexibility, Innovation

EXPERIENCE

NASA L'SPACE Mission Concept Academy Program January 2025 - Present
- Dedicate 10+ hours per week to studying NASA's mission life cycle, gaining insights from former NASA employees.
- Research extensively to conceptualize and design a theoretical interplanetary research mission within Venus' atmosphere.
- Prepare the delivery of a Preliminary Design Review for Venus mission concept, effectively communicating technical details.
- Maintain weekly communication with cross-functional team of 15 individuals, fostering a collaborative team environment.

Kern Health Systems Bakersfield, CA
Enterprise Development Extern June 2024 - August 2024
- Formulated SQL queries to extract and organize healthcare data within Microsoft SQL Server Integration Services.
- Coordinated 40+ daily Scrum meetings, practicing Agile Development Lifecycle within Enterprise Development team.
- Cooperated with database administrators to identify and eliminate 100+ obsolete databases, improving system efficiency.
- Processed 15,000+ medical claims using Microsoft Excel and Electronic Data Interchange softwares.

PROJECTS

Digital Logic Voting Circuit January 2024 - February 2024
- Engineered digital logic circuit to process four voting inputs and generate efficient results of theoretical election.
- Simulated circuit in Multisim and simplified logic expression using 20+ Boolean algebra operations to improve performance.
- Documented detailed truth table, Multisim logic schematics, and simulation results in engineering notebook.
- Collaborated with a partner to construct physical circuit on myDAQ board integrating logic gates (AND, OR, Inverter, NAND, NOR) to validate design and demonstrate practical application.

ClimateCentric (Swift) June 2023
Kode With Klossy iOS Mobile App Development Scholar
- Utilized Swift to develop 4 one-screen mobile apps, integrating GitHub for version control and contribution management.
- Collaborated with multidisciplinary project team to conceptualize and design a wireframe for iOS mobile app ClimateCentric.
- Implemented functional user interface for a carbon footprint calculator quiz within ClimateCentric, ensuring seamless UX.

Airfoil Redesign October 2022 - November 2022
- Conducted in-depth research on airfoil and weight aspects of Zlín Z 42 aircraft, analyzing data to optimize design parameters.
- Simulated airfoil using FoilSim software, adjusting angle of attack, thickness, and camber to achieve target L/D ratio.
- Designed modified airfoil to replicate original aircraft's weight and lift while improving original L/D ratio by over 25%.
- Documented over 7 design iterations, including airfoil sketches, performance calculations, and simulation results in notebook.

LEADERSHIP AND INVOLVEMENT

USC Society of Women Engineers Los Angeles, CA
Corporate Committee Ambassador September 2024 - Present
- Coordinated acquisition of company sponsors and assisted in organizing bimonthly industry panels and networking events.
- Engage in weekly meetings with corporate committee and executive board, contributing to strategic planning for events.
- Recruit women and non-binary individuals into Society of Women Engineers, fostering an inclusive engineering community.