# Audrey Wiebe

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## EDUCATION

**University of Southern California, Viterbi School of Engineering**　　　　May 2028
Bachelor of Science, Astronautical Engineering, Minor in Entrepreneurship　　　　GPA: 3.85/4.00

**Relevant Coursework:** Introduction to Astronautics, Advanced Programming in Python, Calculus III, Differential Equations, Statics, Materials Science, Physics: Mechanics and Thermodynamics & Electricity and Magnetism, Technology Entrepreneurship

## SKILLS

Python, SQL, Agile SDLC Methodologies, Microsoft Excel, Multisim, GitHub, IoT Device Configuration, Remote Sensing, OSHA 10 Certified, Research, Teamwork, Communication, Leadership, Strategy Formulation, Adaptability, Flexibility, Innovation

## PROFESSIONAL EXPERIENCE

**Rain for Rent**　　　　Bakersfield, CA
*Research and Development Engineering Intern*　　　　May 2025 - August 2025
- Conducted 10+ hours of weekly research surrounding Bluetooth Low Energy, LoRaWAN, and Wirepas wireless technologies
- Tested 5+ new products weekly, documenting over-the-air configuration, gateway connectivity, and data to application server
- Collaborated with IoT team to deploy 15+ API integrations, displaying all remote data on AWS internal application server
- Deployed wireless water pump & tank monitoring system using an AWS network to improve remote data collection by 70%
- Developed self-updating IoT intelligence feed using Python & Microsoft Power Automate to reduce manual research by 80%

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

## PROJECTS

**Boeing Freshman Design Challenge**　　　　March 2025
- Engineered an asteroid sample return mission concept in collaboration with three peers, integrating advanced collection techniques through extensively researching previous missions, battery storage, and power generation methods
- Optimized key mission parameters, decreasing duration by over 50% and allowing return of a 20 kg asteroid sample
- Illustrated spacecraft design, incorporating a robotic arm and specialized landing gear for anchoring and material collection
- Showcased feasibility through a data-driven presentation, earning third place in competitive evaluation by Boeing engineers

**OrbiClear Space Debris Removal**　　　　October 2024 - December 2024
- Co-founded OrbiClear, theoretical space debris removal company, in collaboration with three undergraduate peers
- Led the creation of a launchable, satellite-based system that utilizes a reusable SpaceNet attachment to capture, compact, and safely return orbiting debris to Earth for recycling, while also researching operational and financial implications
- Delivered a comprehensive presentation of the concept to a diverse cohort, earning first place based on popular vote

## LEADERSHIP AND INVOLVEMENT

**USC Society of Women Engineers**　　　　Los Angeles, CA
*Corporate Affairs Committee*　　　　September 2024 - Present
- Coordinate acquisition of 10-15 company sponsors and assist in organizing bimonthly industry panels and networking events
- Build and maintain relationships with 10+ industry employers to secure career development opportunities for members
- 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

**USC Rocket Propulsion Lab**　　　　Los Angeles, CA
*Composites Team Contributor*　　　　September 2024 - April 2025
- Devote 5+ hours to surface preparation of student-built rocket, sanding the mandrel to optimize flight performance
- Execute precise cutting of 50+ carbon fiber components, ensuring fibers are placed accurately to enhance structural integrity
- Engage in weekly member meetings, collaborating with 30+ students to stay informed on project developments, receive task delegations, contribute to team discussions, and encourage new member participation for further engagement