# Griffin Kriebel

**644 Alvarado Ave, Apt. 216, Davis, CA 95616 | (484) 577-1804 | gskriebel@ucdavis.edu**

## Education:

University of California, Davis — *Bachelor of Science, Biological Systems Engineering* **Expected Dec 2026**
GPA: 3.29 | Coursework in Mechanical Engineering, Environmental Engineering, and Biotechnical Engineering

## Experience:

**Agricultural Robotics,** Plant Sciences Inc., Mantec, CA — *Agricultural Robotics Intern* **June 2024 - July 2024**

- Collected field data to evaluate robotic performance in strawberry flower elimination.
- Proposed design modifications to improve mechanical reliability and operational efficiency.
- Managed GPS data for tractor-mounted robot navigation.
- Digitized farm maps using Microsoft Excel to streamline field logistics.

**Weaver's Orchard,** Morgantown, PA — *Orchard Maintenance Intern* **June 2023 - Sep 2023**

- Designed and implemented irrigation systems for fruit and vegetable fields.
- Operated and maintained agricultural machinery across a 128-acre orchard.
- Performed crop care tasks including pest management, thinning, and harvesting.

**Austin's Restaurant and Bar,** West Lawn, PA — *Line Cook* **Apr 2021 - Dec 2022**

- Managed kitchen operations in a fast-paced team setting while maintaining academic performance.
- Promoted within two weeks for reliability, adaptability, and initiative.

## Projects:

**UC Davis Comprehensive Renewable Grid Design,** UC Davis ENG 188 | Written Report **March 2025 - June 2025**

- Collaborated to develop a cost-optimized hybrid renewable energy system using NREL's System Advisor Model (SAM) to reduce grid dependency and meet annual energy demand.
- Processed and analyzed hourly annual energy data in Excel to identify the optimal wind-to-solar ratio, minimizing supplemental grid electricity use.

**Vertical Axis Wind Turbine**, Personal Project | GradCAD Model **Dec 2024 - Present**

- Designed and assembled a 3D-printed wind turbine prototype using Fusion 360.
- Collected and analyzed performance metrics including wing swept area, rated power, and power curve to evaluate energy output and efficiency.

**Bike to E-bike Conversion**, Personal Project | GrabCAD Model **Sep 2024 - Jan 2025**

- Engineered and 3D-printed custom motor mounts for electric bike conversion.
- Applied iterative design process and tested mechanical-electrical integration

**Solar Dehydrator**, UC Davis EBS 001 (ABET accredited) | GrabCAD Model **Sep 2024 - Dec 2024**

- Collaborated in a team of four to design, build, and test a food dehydration system.
- Analyzed data on moisture loss and presented efficiency findings in a final report.

**Sustainable Urban Site Design,** UC Davis LDA 003 | GrabCAD Model **May 2024 - June 2024**

- Proposed eco-friendly housing development for repurposing a PG&E yard in Davis, CA.
- Designed technical site layout using AutoCAD and presented to peers.

**MATLAB Blackjack App,** UC Davis ENG 006 | GitHub Repository **Nov 2023 - Dec 2023**

- Developed an interactive blackjack game using MATLAB's GUI framework.
- Met all functionality goals and documented coding process in GitHub.

**VEX Battlebot**, Governor Mifflin Senior High School, PA **Aug 2021 - May 2022**

- Co-designed and programmed a combat robot using Fusion 360 and C++ for a regional competition.

## Skills:

- **Technical Software:** Fusion 360, MATLAB, AutoCAD, SolidWorks, Microsoft Excel
- **Data & Analysis:** Data Collection, Statistical Analysis, Technical Writing, Survey Tools
- **Professional:** Team Collaboration, Creative Problem Solving, Adaptability, Communication