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EDUCATION

University of California, Irvine, Irvine, CA — Aug 2023 – Jun 2027
BS in Mechanical Engineering; SAGE Scholar

WORK EXPERIENCE

ZotBotics, Self-Leveling Anteater Project (SLAP) — Jan 2026 – Present

Mechanical Engineer

- Prototyped structural components in PLA, transitioning to CNC aluminum chassis and CF-ABS gearboxes for improved stiffness and thermal resistance.
- Integrated Eaglepower 8308 brushless motors into custom leg gearboxes for high-torque actuation.
- Performed torque and motion analysis to validate joint performance for walking and dynamic maneuvers.

Engineers for a Sustainable World (ESW), Beach Cleanup Rover Project — Oct 2025 – Present

Mechanical Lead

- Leading mechanical design of a 4-motor tracked rover using sprocket-driven treads with idler wheel tensioning system.
- Designed drivetrain, gear transmission, scooping mechanism, and sand-sifting vibration system in SolidWorks.
- Fabricating and assembling 3D-printed structural and drivetrain components.

Engineering Student Council (ESC), ***Corporate Affairs Member*** — Oct 2025 – Present

- Coordinated and executed professional development events (e.g., networking nights, speaker panels) connecting engineering students with industry professionals.
- Organized technical skill-building workshops and company engagement sessions that supported student career development.

Boca Pizzeria, *Server*, Corte Madera, CA — 2022 – 2024

- Managed and prioritized tasks for up to 15 tables simultaneously in a fast-paced, time-critical environment.

PROJECTS

Robotic Arm — Oct 2025 – Present

- Designed and fabricated custom Arduino-controlled robotic arm using 3D-printed structural components.
- Developed control algorithms for competitive tasks including max-load lifting and precision manipulation.
- Optimized mechanical and control subsystems in a 7-member team to improve performance and repeatability.

Mazda Miata 3D CAD Model — Apr 2025 – Jun 2025

- Modeled full vehicle assembly in SolidWorks and performed FEA to evaluate structural stress distribution under loading conditions.
- Conducted motion studies to analyze suspension kinematics and component interaction.

Walking Robot Project — Apr 2025 – Jun 2025

- Designed multi-link walking robot in SolidWorks, modeling full mechanical assembly.
- Fabricated structural components via 3D printing and laser cutting.
- Integrated drivetrain and linkages to achieve stable walking gait through mechanical optimization.

SKILLS

- **Programming:** Python, MATLAB, Arduino, R
- **Software:** SolidWorks, Excel, LabVIEW, Bambu Studio
- **Fabrication:** 3D Printing, Laser Cutting