Ricardo Cruz

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EDUCATION

California State University, Chico

June 2027

Bachelor of Science in **Mechatronics Engineering**

Minor in **Advanced Manufacturing**: Option in **Applied Robotics**

PROJECTS

IGVC Autonomous Car Testing Program, <u>CSU Chico</u> – Chico, CA

August 2025 – Present

- Learning ROS 2 and NVIDIA Isaac to validate autonomous components, building methods, and sensor-integration troubleshooting skills.
- Collaborating within a multi-disciplinary team to test simulated systems, practicing methodical debugging and cross-functional communication.

Bug Catcher CAD Design, <u>CSU Chico</u> – Chico, CA

August 2025 – December 2025

- Translated an existing bug catcher product into SolidWorks with accurate dimensions and rendering

Stopwatch Counter, <u>CSU Chico</u> – Chico, CA

January 2025 – May 2025

- Designed a stopwatch with pause and reset using logic design in the program LogiSim

Autonomous Jar Stacker, <u>CSU Chico</u> – Chico, CA

August 2024 – December 2024

- Designed and built an autonomous machine that would organize the product in the customers desired orientation and stack the product with care and precision

EXPERIENCE

Math Tutor, <u>Riverside City College</u> - Riverside, CA

November 2023 – July 2024

- Cooperated with peers to improve our methods of tutoring for a more efficient process
- Evaluated student concerns and devised methods of increasing understanding
- Operated tutoring events to improve student interaction and learning

Math Tutor, <u>Maricopa Community College</u> – Avondale, AZ

October 2022 – June 2023

- Collaborated with students and staff to improve teaching methods for more efficient tutoring
- Diagnosed student issues to develop solutions for understanding
- Utilized online communication programs to communicate with students

Welcome Week Assistant, <u>Riverside City College</u> – Riverside, CA

July 2024

- Supported faculty with organization of orientation week for improved student interaction

CERTIFICATIONS

Certified SolidWorks Professional, <u>Dassault Systems</u>

December 2025

- For the adept utilization of the computer aided modeling tool SolidWorks 2025

Certificate for Outstanding Performance, <u>Riverside City College</u> – Riverside, CA

June 2024

- For demonstrating exceptional dedication and outstanding performance as a peer instructor for Riverside City College's Academic Support Program

KEY SKILLS

Microsoft (Word, Excel, PowerPoint), SolidWorks 2025, Lathe, TIG Welding, C++, Keil µVision, Arm-64 Architecture