Katrina Saito

KatrinaSaito.dev

katrinasaito98@gmail.com | (808) 772-7384 | Los Angeles, CA 90005
B.S. Mechanical Engineering, University of Hawai'i at Mānoa (2021)

WORK EXPERIENCE

Mechatronics / Electrical Engineer - PacMar Technologies | Sep 2023 – Mar 2026

- Led full cycle design, fabrication, and testing across electrical, mechanical, and software subsystems for DoD-contracted marine robotics prototyping and research.
- Led electrical and software redesign for a $1.5m Phase II SBIR system to scale down system without sacrificing functionality. Improved manufacturability (DFM/DFA), reduced cost, and increased reliability of a prototype USV.
- Designed embedded control systems (C/C++) for new and existing systems.
- Developed and integrated CAN/J1939-based communication for system-level control and diagnostics.
- Designed electrical systems and electrical subsystem documentation using KiCad, Visio, and Solidworks.
- Built and integrated electromechanical assemblies, including wiring harnesses, 3D-printed hardware, sensor/actuator systems.
- Led and supported component selection, BOM development/tracking, and supplier coordination.

Project Engineer - Unlimited Construction Services | Aug 2021 – Jun 2023

- Coordinated cross-functional teams (vendors, subcontractors, clients) to deliver a $70M high-rise renovation.
- Managed RFIs, contracts, field QA/QC, safety, and permitting to ensure critical milestones are met on schedule.
- Modernized QA/QC and safety workflows using Procore (PMIS), improving documentation quality and inspection processes.

Assistant Machinist / CAD Operator - SOEST Engineering Support Facility | Nov 2017 – Jul 2018

- Designed, documented, and fabricated components for marine research systems and custom repairs.
- Programmed CNC toolpaths using Mastercam for 3-axis machining operations.
- Operated mills, lathes, CNC machines, and TIG welding equipment for fabrication and prototyping.

SKILLS

- **Design & Systems:** Electromechanical Design, System Integration, Rapid Prototyping, DFM/DFA, SolidWorks, KiCad, Visio
- **Embedded & Software:** C/C++, Python, Embedded Systems, Control Systems, CAN/J1939
- **Hardware:** 3D Printing, Wiring & Harness Fabrication, Electrical/Software Troubleshooting, Machining
- **Engineering Operations:** BOM Management, Component Selection, Supplier Coordination, RFI/RFQ, Purchasing

PROJECTS

Wireless Sensor Nodes – Autonomous Marine Robotics (Team Kanaloa)

- Developed independent sensor nodes with precision mounting and IoT communication.
- Developed embedded systems using Arduino and ROS to develop a modular wireless sensor network.
- Secured funding by drafting a successful undergraduate research grant proposal.

ACTIVITIES

VEX / FIRST Robotics Mentor & Volunteer – Designed CAD assemblies, programmed control systems (C++), mentored high school robotics teams, and ran student tournaments as a volunteer.