Sean Kintner

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Objective

Mechanical engineering role in the areas of design, development, QA or testing.

Education

San Jose State University - Bachelor of Science in Mechanical Engineering (Graduating May 2026)

Summary

Mechanical engineer with 4+ years of experience developing and building electromechanical machines. Hands-on background in electronics, mechanical design, and automation. Passion for building started early, at age 10, for designing and assembling projects such as 3D printers, Arduino-based robots, model rockets, automated hydroponic farms and robot arms.

Work History

R&D Engineer, Valley Christian Schools, San Jose, CA – 10/2022 to Present

- Designed custom Wire EDM machine in SolidWorks. Fabricated machine using 3 axis CNC mill, 3 axis CNC lathe and 1500W laser welder.
- Designed 3D printed demonstration robot chassis and 6 axis arm in SolidWorks for high school robotics program. Used pick and place machine for assembling printed circuit board assemblies used in robotics kit.
- Machined and welded undersea platform currently submerged 900m at the bottom of Monterey Bay.
- Currently working on a Deep-Sea Pressure Test Stand for underwater robotics program. Designed in SolidWorks CAD and FEA study done using both SolidWorks simulation and Ansys Mechanical. Drawings for pressure vessel generated according to ASME Y14.5 GD&T standards. Pressure vessel designed according to ASME Boiler and Pressure Vessel Code.
- Designed and manufactured 4-bar solar panel deployment mechanism for XPrize Wildfire detection tower. Mechanism designed in SolidWorks and fabricated using manual and CNC controlled machine tools.

Mechanical Engineering Intern, KLA, Milpitas, CA – 09/2021 to 10/2022

- Designed adjustable fly height gage for various high precision interferometer and confocal sensors for measuring fly height of stages utilizing air bearings.
- Designed 3D printed adjustable dual optical wedge mount to correct for errors in a pentaprism.

R&D Engineering Intern, Alcon Labs, Belmont, CA – 06/2021 to 09/2021

- Used two sample t-test to prove equivalency between autoloading lens lathe/mill and manual lens lathe/mill using Minitab statistical analysis software.
- Designed part trays for storage and machine use in autoloading lens lathe/mill using SolidWorks.

Skills

Design: SolidWorks CAD, DFMA (machining, welding, sheetmetal bending, 3D printing, vacuum molding), FEA (Ansys Mechanical, SolidWorks Simulation), Creo Parametric, Fusion CAD/CAM, ASME Y14.5 GD&T, Altium PCB Design

Fabrication: CNC Mill and Lathe CAM programming and operation, Manual Mill and Lathe operation, Laser Welding, Printed Circuit Board Assembly, 3D Printing, Soldering

Programming: Arduino C++, Python