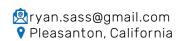
RYAN SASS





Mechanical Systems Engineer & Technical Project Manager

EXPERIENCE

Staff Systems Engineer

Zeiss Microscopy, Inc. Dublin, CA

iii 7/2024

 Managing and contributing to the development of a new cutting-edge x-ray microscope utilizing precision motion control of a complex sample handling system.

Senior Systems Engineer

Ripcord, Inc.

Hayward, CA

iii 5/2023 - 4/2024

- Responsible for the development effort of a robotic automated book imaging machine from prototype to production and deploying two prod machines in Japan.
- Designed robot mechanical systems using SolidWorks.
- Developed and implemented code in V+ (ACE), TwinCAT software, and Visual Studio.
- SolidWorks PDM Admin managed with MySQL.

Senior Application Engineer

EaglePicher, Inc.

Remote

9/2019 - 1/2023

- Improved cost projections by 15% and contract execution efficiency by 10% by created pricing estimation tool linking company resources and project timing.
- Supported SolidWorks design for and generated technical reports for customer engagements.
- Generated business proposals using project management experience to estimate project schedules, resource loading, cost estimations, and project feasibility.

Technical Project Manager

EaglePicher, Inc.

♥Burlingame, CA

== 9/2018 - 9/2019

- Directed product development for a smart battery with hands-on management of multi-disciplinary teams.
- Developed technical solutions to address development gaps and recovery plans, timelines, and revised budgets during development conflicts.
- Achieved timely, quality completion of project CDRLs and deliverables, meeting specified targets.

Lead Automation Engineer

Jabil, Inc.

San Jose, CA

9/2017 - 7/2018

- Team led developing robotic manufacturing work cells.
- Designed and validated robotic end tools and transfer modules for high-volume manufacturing lines.
- Developed software for 6-axis robots and PLCs.
- Generated work plans and budgets for management.
- Collaborated developing a computer vision tool in C++.
- Characterized motors, motion controllers, and bearings.

EDUCATION

Master of Science, Mechanical Engineering

with Emphasis in Robotics and Mechatronics Santa Clara University

iii 2016

CERTIFICATIONS

- Certified SolidWorks Expert
- Certified SolidWorks Simulation Professional – FEA
- Google Project Management

SKILLS SUMMARY

Systems and Automation

UAV automated control, hardware and software control systems, mechatronics & mechanical system design, PLC programming and control

Robotics

FANUC, KUKA, UR, Rethink Robotics, Epson, Cognex Vision, trajectory planning, end effector design and integration, control algorithms, kinematics & dynamics

PLC and Motion

BOSCH Rexroth, ACS, Beckhoff, Parker Hannifin, Panasonic, Galil

Electronics

Circuit diagrams, board design, grounding, DC analysis, validation, debugging, oscilloscope

Firmware and Embedded

C++, C#, V+, TwinCAT, Arduino, Galil DMC, SpEL, Ladder Logic

SolidWorks

Expert certification, FEA Simulation professional, sheet metal, weldments, casting & injection mold tools, advanced surfacing, CAM operations, additive

Mechatronics Engineer, Advanced Product Dev.

- Developed robotic support assemblies with SolidWorks.
- Collaborated with software team to define robotic working space and end-effector tooling envelopes.
- Produced detailed drawings for fabrication of machined and additive manufactured parts.

Mechanical Engineer

Qylur Intelligent Systems, Inc. Palo Alto, CA # 9/2010 - 8/2016

- Drove mechanical design refinements from prototype through initial machine manufacturing production.
- Generated technical drawings using ASME Y14.5-2009
- Implemented and validated design for safety protocols UL, CE, FDA, NEMA, and OSHA.
- Developed PLC code for power distribution system.
- Characterized motors, servos, and bearings.
- Managed the deployment of manufacturing lines, and deployed systems at multiple international locations.

Analyst, Mechanical Engineer II

- Performed structural FEA and design optimization of deployable aerospace solar arrays using ANSYS.
- Implemented design improvements and ensured compliance of components to customer specifications.
- Delivered technical reports of part and assembly analysis.

manufacturing, electrical design, model based design, sustainable design

CAD, Drawing, and Analysis Tools SolidWorks, SolidWorks Simulation, SolidWorks PDM Admin, Ansys FEA, static & dynamic analysis, ASME Y14.5 GD&T, BOMs

Manufacturing & Fabrication

Additive manufacturing, laser cutters, mills, lathes, machined parts, CNC, soldering, hand tools.

Source & Version Control SolidWorks PDM, ECOs, GIT

Product Development

Concept, design, DFM, DFA, prototyping, analysis, design failure mode and effect analysis, testing, validation, review, manufacturing layout, final assembly, quality, and cost reduction

Software Exposure

C, C++, Python, Kotlin, MATLAB, SQL, HTML, CSS, PHP, JavaScript

Office & Project Management Software

Jira, Confluence, Slack, MS Project, WBS, SOW, CDRLs, KPIs, resource management, process improvement, budget and risk management, Agile, MS office, Google suite

Interpersonal

Clear communication, emotional awareness, problem solving, flexibility, leading and following, adaptation

Standards

UL, CE, SEMI, IEC, FDA, OSHA, ASME, ISO, NEMA, FAA, IEEE, MILSTD-810, IP-xx, S9310, SG270, UN/DOT 38.3













