

# RYAN SASS

Mechanical Systems Engineer &  
Technical Project Manager

📞 925-989-6488  
🌐 <https://ryansass.com>

✉️ [ryan.sass@gmail.com](mailto:ryan.sass@gmail.com)  
📍 Pleasanton, California



## EXPERIENCE

---

### Staff Systems Engineer

Zeiss Microscopy, Inc. 📍 Dublin, CA 📅 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 📅 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 📅 2016

### Bachelor of Science, Mechanical Engineering

UC Santa Barbara 📅 2009

## 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.

Think Surgical, Inc. 📍Fremont, CA 📅 11/2016 – 8/2017

- 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

Alliant Techsystems Inc. 📍Goleta, CA 📅 7/2009 – 6/2010

- 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

