

# RYAN SASS

Project Engineer and  
Technical Project Manager

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Pleasanton, California



## EXPERIENCE

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### Senior Systems Engineer

Ripcord, Inc. Hayward, CA 5/2023 – Now

A leader in document-to-data conversion using AI and robotic automation.

- Led the engineering development and managed a 5-person engineering team for the automated robotic book imaging machine project, managing the entire 7-month design development from prototype to production and successfully deploying two prod machines in Japan.
- Designed and fabricated numerous mechanical assemblies and countless parts using SolidWorks to support testing, design development, and final design.
- Developed and implemented robotic movement code and process flow development, showcasing ability to code in V+ (ACE) for the robotic arm, TwinCAT automation software for PLC-Robot arm interfacing, and Visual Studio for coordination of vision components and motion actuators as well as GUIs.
- Promoted to primary SolidWorks PDM Admin managing the company's PDM data Vault with MySQL.

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### Senior Application Engineer

EaglePicher, Inc. Remote 9/2019 – 1/2023

A manufacturing leader in battery, energetic, and BMS technologies with solutions for aerospace, defense, and health.

- Created pricing estimation tools using advanced Excel skills to improve cost projections by 15% and contract execution efficiency by 10%.
- Provided design support in SolidWorks and technical write ups for customer engagements.
- Applied project management skills to generate accurate business proposals including project schedules, resource requirements, cost estimations, project feasibility, and technical solutions.

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### Technical Project Manager

EaglePicher, Inc. Burlingame, CA 9/2018 – 9/2019

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

## EDUCATION

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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

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Certified SolidWorks Expert  
Certificate ID: C-GM95EE8DNE

Certified SolidWorks Simulation  
Professional – FEA  
Certificate ID: C-58B8GQXSLR

Google Project Management  
Coursera Certificate: UPYUU5BGXNBH

## SKILLS SUMMARY

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**Systems and Automation**  
UAV automated control, hardware and software control systems, mechatronics & electro-mechanical systems, PLC programming and control, IloT

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

**Product Development**  
Concept, design, DFM, prototyping, analysis, DFMEA, testing, validation, review, manufacturing layout, final assembly, quality, and cost reduction

**CAD, Drawing, and Analysis Tools**  
SolidWorks, SolidWorks Simulation, Ansys FEA, Technical Drawings and GD&T, PDM & Version Control

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## Lead Automation Engineer

Jabil, Inc.

San Jose, CA

9/2017 – 7/2018

A global leader in contract manufacturing innovating automated manufacturing to reduce mass production costs.

- Led a five-person design team in the development of robotic work cells for large-scale production.
- Designed and validated to create end-effectors, vacuum and pneumatic grippers, and transfer modules to support high-volume production lines.
- Wrote embedded software for 6-axis robots and PLCs.
- Worked closely with senior management to generate plans and budgets using MS Project, Excel, and Visio.
- Collaborated in the development of a product validation tool using Cognex Vision and C++.
- Characterized brushless motors and motion controllers for dual-axis manipulation (ASC and Bosch).
- Validated prototype designs using cutting-edge additive manufacturing, including Poly-jet and ABS.
- Leveraged extensive experience in SolidWorks to update team best practices for engineering drawings.

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## Mechatronics Engineer, Advanced Product Dev.

Think Surgical, Inc.

Fremont, CA

11/2016 – 8/2017

Developing the next gen and manufacturing the only active tracking robotic surgical system for orthopedic surgery.

- Led the development of robotic-arm support assemblies, using SolidWorks.
- Collaborated with software development team to define robotic joint space and end-effector tooling.
- Produced detailed drawings and oversaw fabrication of machined and additive mfg'd (CJP) parts.

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## Mechanical Engineer

Qylur Intelligent Systems, Inc.

Palo Alto, CA

9/2010 – 8/2016

A technology and security company developing an automated, multi-user, x-ray baggage scanner.

- Drove design refinements from prototype through beta production using ASME Y14.5-2009 to convey technical solutions and implementing system safety protocols to meet UL, CE, FDA, NEMA, and OSHA standards.
- Wrote PLC software and oversaw its integration into a multi-tiered software architecture.
- Characterized, selected, and debugged various mechatronic components, including motors and servos.
- Managed the deployment of mechanical production lines, and deployed systems at multiple international locations.

## Project Engineer & Technical Manger

### Firmware and Embedded

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

### Software Exposure

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

### Client-Facing

Clear communication, emotional awareness, problem solving.

### Project Management

MS Project, WBS, SOW, CDRLs, KPIs, resource management, process improvement, budget and risk management

### Electronics

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

### Fabrication

Additive mfg, laser cutters, mills, lathes, CNC, soldering, and hand tools.

### Battery Design

Thermal and runaway mitigation, BMS architecture, system integration

### Battery Safety

S9310, SG270, UN/DOT 38.3, RTA xxx

### Standards

UL, CE, FDA, OSHA, ASME, ISO, NEMA, FAA, IEEE, MILSTD-810, IP-xx

