# Marcos Robles, EIT, PMP

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## MECHANICAL ENGINEER \ TECHNICAL PROGRAM MANAGER

- 7+ years of experience working on agile teams delivering new hardware / processes under tight deadlines and with limited resources
- Drove product life cycle development across 10+ teams & 100+ stakeholders of new electric vehicle featured in Forbes & Business Insider
- Developed manufacturing process for consumer product assembly worth \$500K+ in ED&T
- · Hands on leadership, agile problem solving, engaging communication, detail oriented organization, openly collaborate to achieve vision

# INTERESTS

· Summit hikes, secret ramen spots, funky jam sessions, bouldering (staring blankly at) V5s, jiu-jitsu flow rolling

### PROFESSIONAL EXPERIENCE

02/18 - 01/20	<ul> <li>CANOO   Studio Engineering (Mechanical Engineering, Technical Program Manager)</li> <li>Designed &amp; prototyped 50+ mechanical parts with CATIA for product development studies increasing user satisfaction +30%</li> <li>Drove product development of 10+ teams/vendors &amp; 100+ stakeholders for new electric vehicle architecture utilizing JIRA</li> <li>Analyzed &amp; gathered 300+ competitor metrics/attributes to create the #1 interior-volume-to-footprint ratio in market</li> <li>Managed 50+ resources delivering lifecycle milestones ahead of schedule &amp; under budget with BETA vehicles in under 2 years</li> <li>Designed &amp; optimized 10+ injection-molded parts for assembly, GD&amp;T, &amp; manufacturing saving 25% in weight &amp; cost</li> <li>Lead &amp; directed 50+ cross-functional meetings with design &amp; engineering teams resolving technical issues estimated at \$1M+</li> </ul>
07/15 - 02/18	<ul> <li>FARADAY FUTURE   Senior Studio Engineer (Mechanical Engineering, Technical Program Manager)</li> <li>Managed &amp; integrated 25+ ADAS components using ANSYS SPEOS creating 100+ technical development simulations</li> <li>Negotiated &amp; lead engineering stack-up across 5+ teams improving human factors &amp; safety over 30mm using JIRA</li> <li>Designed &amp; tested mirror replacement systems based on 50+ user studies and 25+ objectives requiring certification</li> <li>Directed &amp; managed 50+ engineering &amp; design resources &amp; scheduling on product development covering 300+ parts</li> <li>Performed 100+ technical systems studies utilizing CATIA, fast-tracking lifecycle development &amp; federal compliance</li> <li>Developed &amp; analyzed 10+ vehicle architectures balancing 50+ product attributes and technical systems relationships</li> </ul>
03/14 - 06/15 JABIL	<ul> <li>JABIL   Engineering Intern (Manufacturing Engineer)</li> <li>Lead technical development of manufacturing process for consumer product assembly worth \$500K+ in ED&amp;T</li> <li>Designed flexible manufacturing cells with automated 6-axis robot, safety redundancy, 3 tool changers, &amp; pneumatic fixtures</li> <li>Reduced &amp; streamlined assembly time 45% with an adaptive, ANSI/ESD S20.20 compliant, 1500 sq. ft manufacturing space</li> <li>Designed 3 ultrasonic welding stations with safety for consumer product assembly of 100+ units/day</li> <li>Performed &amp; documented design of experiments (DOE) which reduced scrap rate 75% and decreased cycle times 50%</li> <li>Documented &amp; archived lessons learned &amp; final technical project reports following ISO 9001 for process improvements</li> </ul>
05/14 - 08/14 M°CORMICK STEVENSON ENGINEERING+DESIGN	<ul> <li>MCCORMICK STEVENSON   Engineering Associate (Mechanical Design Engineer)</li> <li>Designed &amp; prototyped injection molded military training artillery fuze with tight scheduling and budget constraints</li> <li>Performed non-linear finite element analysis (FEA) for product development &amp; optimized design</li> <li>Drafted drawings using Creo Parametric &amp; SolidWorks following ASME Y14.5 GD&amp;T and change management</li> <li>Implemented library of 100+ standard MIL &amp; NAS hardware with configuration management for process improvement</li> <li>Communicated with customers on statements of work (SOW), product development, deliverables &amp; scheduling</li> </ul>
07/13 - 03/14	<ul> <li>SOUTHERN MANUFACTURING TECHNOLOGIES   CNC Operator (Machinist)</li> <li>Manufactured 150+ parts/day for military and aerospace using 5-axis CNC mills and CNC lathes ahead of scheduling</li> <li>Inspected parts following ASME Y14.5 GD&amp;T and quality control processes using calipers, micrometers, &amp; gauges</li> <li>Measured attribute variance of 10+ types of product using statistical process control (SPC)</li> <li>Monitored &amp; controlled part variance following ANSI, MIL-STD, &amp; customer standards with 0 scrap</li> <li>Documented product quality attributes, performance metrics, &amp; features following ISO 9001</li> </ul>
	Experience continues @ www.linkedin.com/in/marcosarobles

#### TOOLS

- CATIA 3DExperience (CAD)
- SolidWorks (CAD)
- Creo Parametric (CAD)
- ANSYS, Mechanical (FEA)
- ANSYS, Fluent (CFD)
- Jira (project management)
- Windchill & Enovia (PLM)

### CERTIFICATIONS

Project Management Professional, PMP Project Management Institute July, 2020

Engineer in Training, EIT

Calif. Board for Professional Engineers December, 2015 EDUCATION

**BSME Mechanical Engineering** University of South Florida 2015



ASME Chairman, part design for Formula SAE, chassis design for human-powered vehicle.