Matthew R. Wyatt

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sx134 Bonita Avenue | Redwood City, CA 94061

EXPERIENCE

Apple, Inc.   Cupertino, CA
Advanced Manufacturing Engineer, IPhone Technical Operations   *Oct. 2018-Present*

Responsibilities:

- Design, implement, and scale automated and semi-automated solutions based on sound engineering principles to drive ambitious goals for KPIs and deliver high precision, high volume IPhone components
- Serve as technical lead and project manager in support of multiple system integrators for several module subassemblies during prototype and final mass production ramp annually.

Tesla Motors, Inc.   Fremont, CA
Senior Manufacturing Equipment Engineer, Body in White (BIW)   *Feb. 2018-Oct. 2018*
Manufacturing Equipment Engineer, Body in White (BIW)   *May 2016- Feb. 2018*
Associate Manufacturing Equipment Engineer, Body in White (BIW)   *June 2014-May 2016*

Responsibilities:

- Automated electro-mechanical and robotic system design, commissioning, and sustaining
- BIW automated production line process capacity/efficiency analysis and improvement
- Sustaining and improving safety in Tesla BIW

Leadership & Accomplishments:

- Ramped Tesla Model 3 BIW from commissioning stage to 5000/units per week over one year
- Improved Overall Equipment Efficiency (OEE) of Model S BIW production from 50% to 95% during ramp from 300 cars/week to 2500 cars/week
- Improved Model S/X Battery Enclosure line OEE from 30% to 99% for gain of 1400 parts/week to 4000
- Project Lead- Battery Enclosure CMT/MIG weld station
  - Led team of 8 engineers and coordinated 9 cross functional teams to install a new automated robotic arc welding cell to improve efficiency (*+10%*), speed (*-20 seconds cycle time*), and quality of Model S/X battery enclosure
- Mechanical/Process Design Lead- Battery Enclosure trunnion load station
  - Designed, sourced, and built tooling for an automated part load cell to improve OEE (+10%) and operator ergonomics
- Controls Lead – Rear Header Upper Robotic Sealer Application
  - Developed PLC/HMI programs to integrate a Kuka robotic sealer for Model X falcon door sealing
- Project Lead– Battery Enclosure flipper arm drive system optimization
  - Developed specs, mechanically designed, and commissioned new drive system for part load process
- Friction Stir Welding Lead- Battery Enclosure 2.0

University of Virginia   Charlottesville, VA
SAE Mini Baja | Vice President, Drivetrain & Frame Captain   *Aug. 2010- June 2014*
Electric Vehicle Senior Thesis Project | Drivetrain Captain   *Aug. 2013- June 2014*

EDUCATION

Georgia Institute of Technology, College of Computing   Atlanta, GA
M.S. Computer Science | Specialization, Machine Learning   *Jan. 2018-Present*
University of Virginia, School of Engineering and Applied Science   Charlottesville, VA
B.S. Mechanical Engineering | Minor, Material Science Engineering   *May 2014*

SKILLS

- 3D Modeling, Catia V5/6 and Solidworks
  - Certified Solidworks Associate
  - Automated cell 3D simulation
- Resistance Spot Welding (RWMA trained)
- Friction Stir Welding
- Machining and Fabrication
  - Vertical mill, Lathe, MIG welding, etc…
- KUKA and FANUC robotics
- PLC Programming/Troubleshooting
  - Rockwell Automation- RS Logix/Studio

- Team Leadership
- Vision System Integration
- Electrical Wiring/Soldering
- Pneumatic Circuit Design
- Networking Ethernet/IP
- Documentation (Work Instructions and Technical)
- Development and Training
- Ignition HMI
- Root Cause Analysis

- Automation Process Engineering
- Equipment Maintenance
- Mechanical Design
- Automation Safety Concepts
- Cost Controls / Scrap Reduction
- Advanced Manufacturing Tech
- Microsoft Office
- Python, Java
- Entry-Level Machine Learning
- Process Capability Analysis/JMP

HOBBIES: Sports, Mountain Biking & Cycling, Motorcycles (Riding & Maintenance), Cars, Travelling, Hiking