**Matthew R. Wyatt**

[mwyatt9214@gmail.com](mailto:mwyatt9214@gmail.com) | (703) 474-0933

134 Bonita Avenue | Redwood City, CA 94061

**EXPERIENCE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Apple, Inc.** Sunnyvale, CA

*Advanced Manufacturing Engineer, IPhone Technical Operations Oct. 2018-Present*

**Tesla Motors, Inc.** Fremont**,** CA

*Senior Manufacturing Equipment Engineer, Body in White (BIW) Feb. 2018-Present*

*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:

* Successfully ramped Tesla Model 3 BIW from commissioning to 5000/units per week over one year
* Improved Overall Equipment Efficiency (OEE) of Tesla Model S BIW production from 50% to 95% during ramp from 300 cars/week to 2500 cars/week
* Improved OEE of Tesla Model S/X Battery Enclosure production from 30% OEE to 99% for output improvement from 100 parts/shift to 295+ parts/shift
* Cost reduction of $950,000+ annually from design improvements to friction stir welding tool assembly
* 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 commissioned tooling (~300 parts) for an automated part load cell to improve efficiency (+10%) and operator ergonomics
* Controls Lead – Rear Header Upper Robotic Sealer Application
  + Commissioned all new communication devices and developed new PLC/HMI programs for integration of an automated robotic sealer to improve Model X falcon door sealing quality
* Project Lead– Battery Enclosure flipper arm drive system optimization
  + Developed specs, mechanically designed, and commissioned new drive system for part load process

**University of Virginia** Charlottesville, VA

*SAE Mini Baja* | *Vice President, Drivetrain & Frame Captain Aug. 2010- June 2014*

* Led team of 15 to design, fabricate, test, and race an off-road buggy in the SAE collegiate series

*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 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_**

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| --- | --- | --- |
| * 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 |

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