

Paul Wilhelm

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Education

Iowa State University Bachelor of Science in Mechanical Engineering Fall 2024
University of Colorado Boulder Master of Science in Electrical Engineering Spring 2028

Experience

Solar Field Engineer – Mechanical, Electrical, Commissioning United States, On-Site
Primoris Renewable Energy Jan. 2025 – Present

- Lucy Solar - 455 MWdc | Kelso 1 solar - 247 MWdc | Kelso 2 solar - 183 MWdc
- Saved \$2.2m predrill costs via careful analysis of requirements and installation records
- Redesigned MV AC homerun junction points to eliminate five sectionalizer cabinets budgeted at \$77k material and \$48k labor total
- Coordinated with subcontractors to resolve SCADA & inverter faults
- Developed Excel tools and VBA automations for site module layout & costs monitoring
- Wrote and coordinated RFIs

Automotive Design Engineer Intern Waukesha, WI
Husco International Jan. 2023 – Aug. 2023, May 2024 – Aug. 2024

- Performed testing and root cause issue analysis using statistical tools (Quantum XL & Minitab) to solve quality problems, expected to deliver ~\$500k annual savings
- Designed, simulated, drafted, and validated short run tooling and test fixtures for the most accelerated project timeline in Husco Automotive history
- Completed tests and test reports to validate parts, enabling a cost savings supplier change
- Identified and addressed assembly line bottleneck expected to result in \$20k annual profit
- Engineered & installed a closed-loop control system for an accelerated durability test stand

SolidWorks Designer Remote
Fiverr - Freelance Feb. 2023 – Feb. 2024

- Interpreted customer requirements to design over 30 parts and assemblies
- Ran movement studies and static simulations to verify design performance
- Designed and communicated efficiently to achieve 97% customer satisfaction

Projects

Cyclone Student Launch, Payload Team Lead Aug. 2021 – December 2024

- Performed trade studies, made critical design decisions to optimize for contract requirements for four remote control or autonomous systems
- Wrote 4 robust C++ programs for embedded systems which all performed in application
- Contributed to over 2000 pages of reports and 11 design reviews for NASA
- Planned and executed detailed testing campaigns to maximize system reliability

Certifications & Awards

- NFPA 70E Standard for Safety in the Workplace (2144168141) 2025
- OSHA 30-Hour 2025
- Remote Pilot (5147246) 2025
- SolidWorks Drawing Tools Professional (C-BUKL5M2RGD) 2024
- Relativity Space 3D Printing Award 2023
- Certified SolidWorks Professional (C-NTX49268FZ) 2022
- Eagle Scout 2019

Additional Skills

- Ansys Workbench – Mechanical & Maxwell; PLM – Windchill; ASME Y14.5 GD&T; Technical writing