

# Paul Wilhelm

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## Education

**Iowa State University** *Bachelor of Science in Mechanical Engineering*

Fall 2024

## Experience

**Solar Field Engineer – Mechanical, Electrical, Commissioning**

*Cape Girardeau, MO*

Primoris Renewable Energy

Jan. 2025 – Present

- Ensured quality and on-time cost and schedule reporting
- Coordinated with subcontractors to resolve SCADA & inverter faults
- Supported trade superintendents with task prioritization and scheduling
- Created Excel tools and VBA automations for site module layout, equipment underutilization, production, quality, and efficiency tracking
- Worked with General Foreman to redesign MV AC homeruns, eliminating \$77k material and \$48k labor budgeted costs

**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

**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

**prISUm Solar Car Team**, Member

Aug. 2020 – May 2022

- Collaborated with composite materials director to fabricate composite parts
- Contributed to system level design and designed individual parts to meet specifications
- Installed and maintained the brake system, electric motors, and structural components

## 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

## Skills

- Leadership, Root Cause Analysis, CAD (most software), FEA, C++, Python, MATLAB, Technical Communication, GD&T, Statistical Analysis, 3DP, Machining, SMAW & MIG, Vacuum Composites, Project Management, Attention to Detail, VBA for Excel