

Jacob Baker

Mechanical Engineering Senior | Aerospace Focus

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-  (903) 445-7030
-  3.93 GPA (45 Credit Hours)
-  Portfolio: jacobebaker.com

SUMMARY

Mechanical Engineering student with hands-on hydraulic system assembly and R&D support experience at Komatsu, plus SolidWorks certification. Focused on aerospace mechanical systems and propulsion design.

EXPERIENCE

Intern and Hydraulic Assembly

Komatsu - Longview, TX

April 2024 - Current

- Support R&D engineers in test preparation and data collection for electric motor testing and validation.
- Assembled hydraulic systems for the L-2350 wheel loader, including hose routing, component prep, and quality checks.
- Identified hydraulic leaks, fitment issues, and pressure anomalies during system testing and troubleshooting.
- Prepared components, staged tools, and kept the build area organized to maintain efficient workflow.

Business Owner

Elite Powerwash - East Texas Area

August 2022 - Current

- Manage repeat commercial contracts while maintaining full-time student status.
- Modified and scaled pressure washing equipment to meet evolving project requirements.
- Personally responsible for quoting, invoicing, and scheduling.

Project Coordinator

Hanna Homes and Construction - Plano, TX

August 2021 - August 2022

- Coordinated between field crews and management to resolve on-site issues and process warranty claims.
- Supported daily operations by delivering materials, clarifying instructions, and helping keep projects moving efficiently.
- Safely transported debris and heavy equipment across the city, often navigating high-traffic conditions.

SKILLS

- **Technical Skills:** SolidWorks, C++, LabVIEW, Excel, MATLAB, DAQ Systems, Rapid Prototyping
- **Engineering Fundamentals:** Fluid Dynamics, Thermodynamics, Dynamics, Stress Analysis, Design Optimization
- **Hands-On:** Hydraulic Assembly, Electrical Assembly, High Voltage Systems & Safety, Forklift Operation

EDUCATION

LeTourneau University

BSME (2025-27)

GPA: 3.93 (45 Credit Hours)

Kilgore College

Engineering Coursework (2024-25)

GPA: 3.65 (33 Credit Hours)

Lone Star College

Engineering Coursework (2025)

GPA: 4.00 (13 Credit Hours)

CERTIFICATIONS

- Overhead Crane and Rigging
- Certified SolidWorks Professional

FEATURED PROJECTS

- Dual-Motor Torque Measurement** - Strain-gauge shaft testing for torque measurement.
- Motor Assembly Improvement** - Identified assembly issue and implemented solution.