

# Alex Newhall

(765) 698-0295 | newhallas@gmail.com | linkedin.com/in/asnewhall | anewhall3.wixsite.com/anewhallport

Industrial engineer specializing in optimization and cost reduction for space manufacturing. Agile problem solver with an academic foundation in engineering, management, and data analysis with hands-on experience across aerospace and automotive industries.

## EDUCATION

- COLORADO STATE UNIVERSITY** | WALTER SCOTT COLLEGE OF ENGINEERING | FORT COLLINS, CO May 2026
- *Aerospace Engineering Master's Certificate* | GPA: 3.7
- UNIVERSITY OF OKLAHOMA** | PRICE COLLEGE OF BUSINESS | NORMAN, OK May 2026
- *Master of Business Administration (MBA)* | Entrepreneurship Certificate | GPA: 3.75
  - *Master of Science in Management of Information Technology* | GPA: 3.72
- PURDUE UNIVERSITY** | COLLEGE OF ENGINEERING | WEST LAFAYETTE, IN May 2024
- *Bachelor of Science in Industrial Engineering* | Minor in Management

## EXPERIENCE

- AXIOM SPACE** | HOUSTON, TX | HUMAN SPACEFLIGHT MANUFACTURER June 2025 – August 2025  
*Industrial Engineering Intern*
- Led a major CNC machine shop redesign project, identifying 160 action items to address 70 improvement opportunities to improve quality, cost reduction, lead time, and data collection with a lean Six Sigma framework to achieve production targets.
  - Supported supplier QMS audits and led 6 DfM reviews, delivering feedback on manufacturability and assembly instructions.
  - Established company manufacturing and 5S standards, improving cost visibility and AS9100 compliance across 6 departments.
  - Reviewed and authored process documentation for work instructions and inspection plans for manufacturing and assembly.
- NSK LTD.** | LIBERTY, IN | AUTOMOTIVE BEARING MANUFACTURER August 2024 – December 2024  
*Data Engineering Co-op*
- Designed 7 databases to automate production and inventory data capture, enabling real-time operational insight.
- Industrial Engineering Intern* May 2024 – August 2024
- Developed QuickBase database to track plant-wide tool use, shifting maintenance from reactive to proactive.
  - Authored 5 industrial studies using RCA and achieved 50% noise reduction, 33% labor efficiency gain, and new robotics.
- CROWN EQUIPMENT CORPORATION** | NEW CASTLE, IN | ELECTRIC FORKLIFT MANUFACTURER May 2023 – August 2023  
*Industrial Engineering Intern*
- Designed and built a \$100K automated lubrication system for steel pressing, reducing downtime and increasing reliability.
  - Developed novel tooling and led lean Six Sigma continuous improvement projects to improve work cells.
- Fabrication Engineering Intern* May 2022 – August 2022
- Led time cycle studies that identified bottlenecks 50% over target, with adopted recommendations improving throughput.
  - Collaborated across departments to redesign fixtures and develop NX tooling models, driven by quality lab work.
- PRIMEX PLASTICS INC.** | RICHMOND, IN | PLASTICS AND CHEMICAL MANUFACTURER May 2021 – August 2021  
*Line Operator*

## PROJECTS

- **Ready3 facility design:** consultation in designing the layout and facilities for a new aerospace defense heat treat facility.
- **Oklahoma Spaceworks AI:** consultation in the business use case and technical design of onboard satellite AI software.
- **LumenUs industry analysis:** authored research on the earth observation data industry, identifying strategic opportunities.
- **Purdue AFAB capstone:** led project to develop design recommendations for automating a sheet metal handling operation.
- **Phiogen data analysis:** performed statistical analysis on patient data using Python to uncover insights for biomedical trials.

## SKILLS

- **Certifications:** Lean Six Sigma green belt, AS9100 compliance, CMfgT, Excel MOS, GD&T, Google data analytics, Ansys STK
- **Manufacturing:** DfX, 5S, Six Sigma, 8D RCA, Kaizen, additive mfg, machining, PLM, BOMs, FOD control, layout design
- **Software:** NX, SolidWorks, CATIA, Python, R, SQL, SAP ERP, Excel, Power BI, Opcenter MES, Teamcenter, databases, AWS
- **Soft skills:** project management, data-driven, continuous improvement mindset, resilience, collaborator, communication
- **Business analysis:** cost reduction, VSM, supply chain management, planning, data management, procurement, lean startup

## LEADERSHIP AND INVOLVEMENT

- **OU Rocket Team:** mfg team member, supporting DfM and composite manufacturing for NASA student launch competition.
- **Purdue Design and Innovation Learning Community:** led project to design and 3D print a model rocket with payload.
- **Boy Scouts of America:** attained rank of Eagle, troop leader for 2.5 years, led multiple community service projects.
- **OU Graduate Teaching Assistant:** supporting entrepreneurship researching activities and classroom management.