

Charlie Blake

☎ (281) 555-1234 ✉ charlie.blake@example.com 🌐 linkedin.com/in/charlieblake 📍 123 Space Lane, Houston, TX 77001

SUMMARY

Graduate student specializing in mechanical engineering, focusing on structural analysis and thermofluids. Enthusiastic about space exploration and dedicated to driving innovative engineering solutions within the aerospace sector. Possess hands-on experience through academic projects and internships that demonstrate collaboration and effective communication of complex concepts. Proven ability to work in fast-paced environments, bringing both technical skills and leadership qualities to deliver impactful results. Ready to contribute to high-performance teams and engage deeply in meaningful project work at Blue Origin Innovations.

EDUCATION

Master's Degree in Mechanical Engineering

2027

University of Texas at Austin GPA: 3.8

Austin, TX

Coursework: Thermodynamics, Fluid Mechanics, Structural Analysis, Propulsion Systems

TECHNICAL SKILLS

- **Engineering Software:** MATLAB, ANSYS, COMSOL
- **Data Analysis Tools:** Python, R, Excel
- **Propulsion Systems:** Jet Engines, Rockets, Turbines
- **Technical Writing Software:** LaTeX, Microsoft Word, Google Docs
- **Simulation Tools:** ANSYS Fluent, MATLAB Simulink, SolidWorks Flow Simulation
- **Project Management Tools:** Trello, Asana, JIRA
- **Presentation Tools:** Microsoft PowerPoint, Prezi, Google Slides
- **Statistical Software:** SPSS, SAS, Minitab
- **Modeling Software:** AutoCAD, CATIA, Rhino
- **Thermodynamic Testing Equipment:** Data Acquisition Systems, Sensors, Test Rig Apparatus

SKILLS

- Data Processing
- Combustion Analysis
- SolidWorks
- Public Speaking
- Thermofluids
- CAD Software
- Technical Writing

EXPERIENCE

Mechanical Engineering Intern

January 2026 - Present

University Project

Remote

Focused on design and analysis of propulsion systems within a capstone project supported by effective team collaboration and usage of CAD and simulation tools for detailed analysis.

- Collaborated on design and analysis of propulsion systems using state-of-the-art CAD software and simulation tools.
- Conducted experiments assessing thermofluid dynamics, leading to design parameter refinement for enhanced system performance.
- Produced comprehensive reports documenting findings, significantly improving technical communication with stakeholders.
- Engaged actively in peer-review sessions to provide constructive feedback, fostering a strong collaborative learning environment.
- Contributing extensively to all phases of prototype development, from initial conceptualization through successful testing.
- Delivered project presentations showcasing results to faculty and industry professionals, earning commendations for clarity and depth.

Research Assistant

September 2025 - December 2025

Academic Research

Houston, TX

Supported research initiatives in thermodynamics and combustion, leveraging analytical skills to aid data progression and academic acknowledgment.

- Assisted in researching thermodynamics and combustion processes, including data collection and key finding analysis.
- Maintained and developed experimental setups for controlled testing of various combustion models.
- Teamed up with peers to publish research findings, significantly enhancing visibility in reputable journals.
- Applied statistical software proficiently to interpret data trends and improve existing computational models.
- Presented research outcomes effectively at a national conference, demonstrating superior public speaking capabilities.
- Mentored undergraduates in laboratory techniques and data-analysis methodologies, promoting academic support.

Capstone Project Developer

January 2025 - May 2025

Course Project

Remote

Led a dedicated team focused on designing structural components for aerospace applications, utilizing advanced simulation tools and strong documentation.

- Directed a team tasked with structural component design for simulated aerospace application, prioritizing safety and efficiency.
- Utilized Finite Element Analysis (FEA) software rigorously to evaluate the structural integrity under various loading scenarios.
- Crafted extensive documentation outlining design decisions and analytical strategies for future reference within projects.
- Collaborated closely with faculty coaches to ensure alignment of project milestones with real-world industry expectations.
- Hosted regular team meetings for progress tracking and challenge resolution, cultivating accountability and teamwork.
- Showcased final presentations before a panel of industry experts, achieving praise for innovative approach to design.

LEADERSHIP & AWARDS

- Dean's List, University of Texas at Austin (2025, 2026)
- First Place, Engineering Design Challenge (2025)

CERTIFICATIONS

- Certified in SolidWorks 📅 2026
- Data Analysis and Visualization with Python 📅 2026

PROFESSIONAL AFFILIATIONS

- Member, Aerospace Engineering Society, University of Texas at Austin
- Volunteer, STEM Outreach Program, promoting engineering careers to high school students

LANGUAGES

- English (Native)
- Spanish (Intermediate)

ADDITIONAL INFORMATION

Work Status : Authorized to work in United States. No sponsorship required.

REFERENCES

AVAILABLE ON REQUEST