

Emily Hamilton

📞 (303) 555-0178 ✉️ emily.hamilton@example.com
🌐 linkedin.com/in/emilyhamilton 📍 Denver, CO 80202



SUMMARY

Focused biomedical engineering graduate proficient in laboratory research and analysis. Passionate about advancing healthcare through technological innovation. Gained hands-on experience in experimental design, statistical data analysis, and collaborative problem-solving during academic projects. Eager to contribute to innovative biomedical solutions while learning from industry leaders and fostering strong professional relationships.

EDUCATION

Bachelor of Science in Biomedical Engineering 2026
University of Colorado GPA: 3.7 Boulder, CO
Coursework: Data Analysis, Medical Device Design, Material Science, Machine Learning

TECHNICAL SKILLS

- **Statistical Tools:** SPSS, R, Python
- **Design Software:** AutoCAD, SolidWorks, Pro/ENGINEER
- **Research Techniques:** Qualitative Analysis, Quantitative Analysis, Experimental Design
- **Data Visualization:** Matplotlib, Seaborn, Tableau
- **Prototyping Tools:** CNC Machines, 3D Printing, Laser Cutting
- **Machine Learning Frameworks:** TensorFlow, Keras, Scikit-Learn
- **Writing & Presentation Tools:** Microsoft PowerPoint, LaTeX, Google Slides
- **Database Management:** SQL Server, MySQL, MongoDB
- **Collaboration Platforms:** Slack, Zoom, Microsoft Teams
- **Medical Device Regulations:** FDA Guidelines, ISO Standards, CE Marking

SKILLS

- Biomedical Engineering
- Data Analysis
- Problem Solving
- Communication
- CAD Software
- Statistical Analysis
- Machine Learning
- Research Methodologies

EXPERIENCE

Research Assistant January 2026 - Present
University Research Lab Boulder, CO

Support advanced biomedical research through experimental design and data analysis. Collaborate with researchers to enhance findings and maintain compliance with scientific protocols.

- Executed experiments focusing on material properties and their applications in healthcare.
- Analyzed data applying advanced statistical methods for publication-ready results.
- Crafted detailed presentations communicating complex findings effectively to various stakeholders.
- Troubleshoot experimental issues on-the-fly, showcasing critical problem-solving skills.
- Participated in strategic discussions during weekly team meetings to steer project directions.
- Maintained meticulous lab records aligning with established safety guidelines and quality standards.

Capstone Project Developer August 2025 - December 2025
University of Colorado Boulder, CO

Lead the development of an innovative medical device prototype aimed at improving blood analysis. Engage peers through hands-on collaboration and iterative testing.

- Directed a team project focused on designing a prototype for efficiency in blood sample analysis.
- Reviewed literature extensively to guide the design process and identify technology improvements.
- Utilized CAD software for clear visualization of design concepts among project stakeholders.
- Refined the prototype through rigorous iterative testing, aligning with performance benchmarks.
- Delivered final presentation to faculty highlighting depth of research and findings.
- Gained valuable insights into project management across all phases of product development.

Machine Learning Intern

May 2025 - July 2025

Student Innovation Lab

Remote

Contributed to machine learning projects targeting data accuracy enhancements in biomedical settings. Worked closely with tech teams to deliver real-world application outcomes.

- Advanced predictive modeling techniques through implementation of specialized algorithms.
- Collaborated on software integration ensuring usability for healthcare practitioners.
- Sought user feedback during testing phases to refine features for optimal performance.
- Documented coding processes and developed instructional materials for future project scalability.
- Fostered creativity by brainstorming solutions during interactive team sessions.
- Developed substantial knowledge regarding foundational ML principles as applied in biomedicine.

LEADERSHIP & AWARDS

- Dean's List, University of Colorado 2024, 2025
- Certificate of Excellence in Biomedical Engineering Innovation 2025

CERTIFICATIONS

- Google Data Analytics Professional Certificate 📅 2026
- Project Management Essentials Certification 📅 2026

PROFESSIONAL AFFILIATIONS

- Member, Biomedical Engineering Society, 2024 – Present
- Volunteer, Local Health Fair, 2025

LANGUAGES

- English (Native)
- Spanish (Intermediate)

ADDITIONAL INFORMATION

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

REFERENCES

AVAILABLE ON REQUEST