

Curriculum Vitae for Ashley Bailly, M.Eng.

Education

- Bachelor of Science in Biomedical Engineering, Texas A&M University, 2023
- Undergraduate Thesis: “Methods for *in vitro* Development of Thrombi and Puncture Testing to Assess Clot Mechanical Properties”
- Master of Engineering in Biomedical Engineering, Texas A&M University, 2024

Specialized Professional Competencies

- Biomechanical investigation, reconstruction, and failure analysis for a variety of situations and environments
- Analysis of motion and injury biomechanics in sporting, emergency response, military, and vehicle incident applications
- Evaluation of accident and injury data
- Exemplar vehicle and human surrogate testing and analysis

Professional Experience and Qualifications

- Student Researcher, TAMU, NeuroErgonomics Research Lab, August 2021 to May 2022
- Student Engineer, Southwest Research Institute, May 2022 to August 2022
- Researcher Scholar, TAMU, Cardiovascular Pathology Lab, August 2022 to May 2023
- Student Engineer, Southwest Research Institute, June 2023 to August 2023
- NSF I-Corps Program Researcher, TAMU, Hanks Research Lab, August 2023 to May 2024
- Senior Engineer, Carr Engineering, Inc., July 2024 to present

Publications and Presentations

- V.B. Kote, L. Frazer, A. Shukla, A. Bailly, S. Hicks, D. Jones, D. DiSerafino, M. Davis, D. Nicolella, “Probabilistic Finite Element Analysis of Human Rib Biomechanics: A Framework for Improved Generalizability,” *Ann Biomed Eng* (2024)
- Texas A&M Engineering Project Showcase, Novel Method to Deliver Apneic Oxygenation During Intubation, April 2023
- Human Factors and Ergonomics Society Annual Meeting, Analysis of Cognitive Load in Personalized Emergency Medical Training Using Augmented Reality, April 2022