



BACKGROUND

Ms. Graham is an accident reconstructionist specializing in the reconstruction of motor vehicle, pedestrian, and bicycle collisions. She is certified as a Bosch Crash Data Retrieval (CDR) Tool Technician, is experienced in documenting evidence utilizing three-dimensional laser scanning, and is certified as a pilot of small Unmanned Aircraft Systems (sUAS) by the Federal Aviation Administration. Ms. Graham earned her Bachelor of Science in Mechanical Engineering from the University of Maryland (UMD). While a student at UMD, she volunteered as an Emergency Medical Technician (EMT) at Hyattsville Volunteer Fire Department. Ms. Graham is accredited as a Traffic Accident Reconstructionist by the Accreditation Commission for Traffic Accident Reconstruction (ACTAR #5032). She is a licensed Professional Engineer in the Commonwealth of Pennsylvania (PE98037).

AREAS OF SPECIALTY

- Accident Reconstruction
- EDR (Black Box) Imaging and Analysis
- Three-Dimensional Laser Scanning
- Sightline Obstruction Analysis
- Pedestrian Accident Analysis
- Scene Documentation and Diagramming
- Forensic Video Analysis
- Nighttime Visibility/Conspicuity

EDUCATION

- Bachelor of Science in Mechanical Engineering, University of Maryland, May 2019
 - College Park Art Scholars Citation received May 2017
- Bosch CDR Tool Technician, University of North Florida Institute of Police Technology and Management, July 2023
- Motorcycle Collision Reconstruction, Lightpoint Learning, September 2023
- Emergency Medical Technician, Delaware County Community College, August 2014

PROFESSIONAL EXPERIENCE

June 2023 – Present | ARCCA, LLC | Accident Reconstructionist

- Investigates and reconstructs motor vehicle collisions
- Images Event Data Recorders in passenger vehicles
- Documents and analyzes evidence utilizing 3D laser scanning hardware and software
- Conducts vehicle, site, and damage inspections
- Assesses vehicle dynamics in response to applied crash forces
- Utilizes reconstruction software such as EDCRASH, EDSMAC, Virtual CRASH, SCENE, and 3DF Zephyr
- Operates unmanned aerial vehicles (UAV)

March 2021 – June 2023 | Flexicon Corporation | Mechanical Design Engineer

- Modeled 3D and sheet metal parts, weldments, and assemblies in Inventor
- Detailed Drawings for job specific parts and assemblies
- Designed and detailed product line standards
- Worked with AutoCAD 2D drawings for reference parts and layouts

June 2020 – August 2020 | MedMentors | Summer Research Assistant

- Conducted organizational research on lupus and kidney related non-profits

October 2015 – July 2019 | Clarice Smith Performing Arts Center | Scene Shop Assistant

- Constructed sets for Dance, Theater, and Opera performances
- Developed and applied MIG welding skills

May 2017 – August 2017 | American Society for Engineering Education | Summer Intern

- Interned with Naval Surface Warfare Center - Philadelphia
- Tested the tolerance and accuracy of 3D printers
- Optimized print settings for different materials for benchtop 3D printers

PROFESSIONAL AFFILIATIONS

- Society of Automotive Engineers (SAE)
- National Association of Professional Accident Reconstruction Specialists (NAPARS)
- National Society of Professional Engineers (NSPE)