BACKGROUND

Mr. Lebak is an accident reconstructionist specializing in the reconstruction of motor vehicle, pedestrian, and bicycle collisions. He has training and experience in constructing scene diagrams and drawings using computer aided design software, is certified as a Bosch Crash Data Retrieval (CDR) Tool Technician, and is experienced in documenting evidence utilizing three-dimensional laser scanning. Mr. Lebak is a certified pilot of Unmanned Aircraft Systems (UAS) by the Federal Aviation Administration. He is experienced in the documentation of accident scenes with aerial photographs and video, and the utilization of aerial photogrammetry in accident reconstruction. He is a researcher in the field of accident reconstruction, whose peer-reviewed work has been published by the Society of Automotive Engineers (SAE). Mr. Lebak earned his Bachelor of Science in Mechanical Engineering at Drexel University.

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
- Infotainment Download and Analysis

EDUCATION & TRAINING

- Bachelor of Science in Mechanical Engineering, Drexel University, 2020
- Bosch CDR Tool Technician, University of North Florida Institute of Police Technology and Management
- Event Data Recorder Use in Traffic Crash Reconstruction for Engineers, Ruth Consulting

PROFESSIONAL EXPERIENCE

June 2020 – 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)

September 2018 – March 2019 | JPMorgan Chase | Chief Data Office Process Reengineering Analyst Co-Op

- Designed and documented process flows and created key performance indicators
- Identified and recommended solutions to reduce manual processes and enhance analytical capabilities

- Worked with stakeholders to prioritize data opportunities and partner with technology to implement solutions
- Worked with stakeholders to define data requirements arising from evolving regulations and new business initiatives

October 2017 – March 2018 |Lockheed Martin | Hardware Engineer Co-Op

- Assisted senior engineers in the design, analysis and development of electronic and microwave equipment as applied to military radar systems
- Produced detailed mechanical designs for the fabrication of electronic, mechanical and structural assemblies including components such as cable assemblies and antenna structural components
- Performed shock and vibration lab testing to determine the efficacy of specific Radio-Frequency hardware

September 2016 – May 2017 |ARCCA, Incorporated | Mechanical Engineer Co-Op

- Employed engineering principles to reconstruct and analyze automobile and pedestrian collisions
- Developed innovative new fieldwork methodologies for the publication of data and research in technical journals
- Partnered with the National Hockey League to evaluate player and goalie protective equipment
- Utilized 3-D laser scanners and CAD software to inspect vehicles and sites involved in crashes in order to recreate and analyze the scene

PROFESSIONAL AFFILIATIONS

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

PUBLICATIONS

- Harrington, S. and **Lebak, G.**, "The Placement of Digitized Objects in a Point Cloud as a Photogrammetric Technique," SAE Int. J. Trans. Safety 6(2):87-106, 2018.