

Jeremy Aparicio, PE

Forensic Engineering Expertise

Collision Analysis

Mr. Aparicio has extensive education, training and experience in the analysis of passenger vehicle, commercial vehicle and motorcycle speed determination, crash dynamics, seat belt and occupant kinematic analysis, pedestrian and bicycle impacts, site distance evaluation, crash data recovery (EDR/CDR), photographic and video analysis, reverse projection photogrammetry, unmanned aerial vehicle mapping, high-definition scanning, simulations, and more.

Forensic Visualization/Animation

Construction of forensic animations and other visualizations to produce demonstrative exhibits to assist the trier of fact. Mr. Aparicio utilizes leading edge applications of photogrammetry, videogrammetry analysis combined with aerial imagery, lidar and other data sources to construct physics based animations and visualizations of incidents and events.

Qualifications & Training

- SAE – Applying Automotive EDR Data to Traffic Crash Reconstruction, June 2025
- SAE – Fundamentals of Vehicle Dynamics, May 2025
- Virtual Crash Collision Simulation Software – In Person Training, April 2025
- PC - Crash Collision Simulation Software - Expert Training, February 2023
- SAE - Photogrammetry and Analysis of Digital Media, September 2022
- Nederveld U - Live Crash Testing and Analysis, June 2022
- SAE - Vehicle Crash Reconstruction: Principles and Technology, May 2022
- Nederveld U – Kinematics, Force-Deflection, and EDR data, February 2022
- Crash Data Retrieval Technician Training, September 2021
- UAS Ground School/FAA Part 107 Exam completion, August 2021
- Nederveld U – Collision Analysis Fundamentals, September 2020
- 3ds Max Design Fundamentals, June 2020

Education

Bachelor of Science in Mechanical Engineering
University of Colorado at Boulder, Boulder, CO
May 2019

Licenses & Certifications

PE – Professional Engineer

Licensed by the State of Colorado – Number PE.0065683
Licensed by the State of South Dakota – Number 17429
Licensed by the State of Wyoming – Number PE 21158
Licensed by the State of Michigan – Number 6201314965
Licensed by the State of Idaho – Number 1571750
Licensed by the State of Louisiana – Number PE.0050361

Remote Pilot License

Licensed by the FAA – Number 4423855

Employment History

Forensic Engineer

Nederveld, Inc.

2020 - Present

Duties include forensic engineering analysis relating to vehicular collisions, including calculating speeds, positions, forces, time-distance, visibility, traffic signal-timing, and more. Vehicle and scene inspections, including photography, 3D high-definition scanning, vehicle data imaging (EDR/CDR), and drone aerial mapping. Extensive utilization of reverse projection photogrammetry and collision simulation software. Construction of forensic animations and other visualizations. Conduct research, complete engineering calculations and analysis, prepare expert reports, develop conclusions, and provide forensics engineering testimony relative to results, findings, and conclusions.

Collision Analyst

OEC Forensics

2020 - 2020

Duties include forensic engineering analysis relating to vehicular collisions, including calculating speeds, positions, forces, time-distance, visibility, traffic signal-timing, and more. Vehicle and scene inspections, including photography, 3D high-definition scanning, vehicle data imaging (EDR/CDR), and drone aerial mapping. Extensive utilization of reverse projection photogrammetry and collision simulation software. Construction of forensic animations and other visualizations.

Recording Engineer

University of Colorado at Boulder School of Music, Boulder, CO

2018-2019

Duties included audio equipment setup and management, live-recording parameter adjustments, post-processing and compiling of audio files.

Publications

"Manual Reverse Projection Photogrammetry Principles and Techniques in Autodesk 3ds," Defended at the NAFE Winter Conference, January 20, 2024, publication pending

Professional Affiliations

Member: Society of Automotive Engineers – ID 6155678462