



**Michael A. Jorgensen, BSME**  
*Forensic Expert*

## **EDUCATION**

- Bachelor of Science in Mechanical Engineering  
University of Nevada, Las Vegas, 2019

## **EXPERIENCE**

### **American Bio Engineers, LLC, 2015/Present**

6351 Hinson St., Ste. R  
Las Vegas, NV 89118

- Accident Reconstruction with areas of expertise in Vehicular Accidents, Vehicular Dynamics, Speed Analysis, Time/Motion Studies, Vehicle Maintenance, and Design Strength Analysis.

Types of cases reconstructed include: Auto v. Auto Collisions, Auto v. Heavy Truck/Trailer Collisions, Auto v. Truck Collisions, Auto v. Motorcycle Collisions, Auto v. Pedestrian Collisions, and Vehicle Rollovers.

## **PUBLICATIONS**

Jorgensen, M., Swinford, S., and Jones, B., "Validation of Vehicle Speed Analysis Utilizing the iINPUT-ACE Camera Match Overlay Tool," SAE Technical Paper 2021-01-0877, 2021, doi:10.4271/2021-01-0877.

Vigil C., Salboro C., Jorgensen M., Jones B., Brink J., Swinford S., "Validation of Utilizing a Self-Propelled Crash Sled to Simulate Occupant Accelerations in Minor Rear-End Impacts," SAE Technical Paper, 2022-01-0857.

## **LECTURES PRESENTED**

- Presented at the iINPUT-ACE 2021 Video Evidence Symposium on the topic of advancements in technology for calculating speeds, and how a recent publication addressed the challenges, limitations, and solutions for measuring distances and speeds from video evidence.

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- Presented the *Validation of Vehicle Speed Analysis Utilizing the iINPUT-ACE Camera Match Overlay Tool* live at the SAE World Congress 2021 Digital Summit.

## **PROJECTS**

- Designed, manufactured, and programmed FIRST Robotics Competition (FRC) robots for the 2014 and 2015 competitions.
- Designed, manufactured, and programmed a crash simulation sled for simulating low-speed impacts.

## **LICENSES**

- OSHA 30-hour Construction Safety and Health License #31-602011114
- Class M Motorcycle License
- Motorcycle Safety Foundation Basic RiderCourse License #B589883

## **ASSOCIATIONS**

- Southwestern Association of Technical Accident Investigators (SATAI)
- Society of Automotive Engineers (SAE)
- Nevada State Board of Professional Engineers and Land Surveyors (E.I.T.)

## **SPECIALIZED TRAINING SEMINARS ATTENDED**

- "PhotoModeler Training" instructed by *Dan Mills* (Las Vegas, NV, 2017)
- "ARC-CSI Crash Conference" presented by ARC-CSI (Las Vegas, NV, 2017)
  - Crashes in the Courtroom: Engaging the Jury and Surviving Motions to Strike
  - Reconstruction from Body Worn Cameras
  - Gap Acceptance: How Far Away Must an Approaching Vehicle Be Before a Driver Will Pull Out
  - NTSB Highway Crash Investigations, Recent Cases and Issues
  - Reconstruction and Injury Analysis in Low-Speed Inline Collisions
  - Pedestrians and Nighttime Recognition
  - Going Airborne: Deploying Drones
  - Collision Scene Mapping using UAS Technology, a Field to Finish Approach
  - Unmanned Aircraft: A Profession with a Profession
  - Quantitative Study of Passenger Veh. Braking Performance During Emergency Application
  - Overheating of Heavy-Duty Truck Brakes: Discs vs. Drums
  - Pedestrian Walking Speeds- What Numbers to Use
  - Pedestrian Crash Reconstruction Methodologies

- "SATAI Conference" presented by *Southwest Association of Technical Accident Investigators (SATAI)* (Glendale, AZ, 2019)
  - Nighttime Crashes on Unlit and Lighted Roads
  - Driver's Acceleration Behaviors
  - Pedestrian Walking Speeds What Numbers to Use?
  
- "SATAI Conference" presented by *Southwest Association of Technical Accident Investigators (SATAI)* (Glendale, AZ, 2020)
  - Electric Scooters
  - E-Scooter vs. Car Crash Test
  - CDR System Operators / Analysis & Applications Course Series – The CDR 900 Interface and Toyota TechStream / PCS & VCH Data
  - iINPUT-ACE Traffic Seminar
  
- "EDR Summit" presented by *Collision Publishing* (Houston, TX, 2020)
  - Bosch CDR Tool
  - What Does "End of Event" Mean?
  - Repowering & CDR Technician Review/Update
  - Ignition Cycles
  - Locomotive Event Recorder Downloads
  - Crossing Signal Event Recorders
  - Legal Challenges Regarding EDR Data in Testimony
  - Traffic Signal as an EDR; Did it Record Your Crash
  - How an Auto Insurance Carrier Claims Department Incorporates Crash Data into Investigations of Loss
  - Testing and Validation of Toyota Vehicle Control History Data
  - ATV Rollover
  - Subaru ADAS System
  - Pedestrian Automatic Emergency Braking (P-AEB)
  - Can Autonomous Emergency Braking Data be "Event Data?"
  - Tesla Update
  - Berla Update
  - Examples of Forensic Investigations Using the Berla Digital Tool
  - Nissan Steering and Recording Threshold
  
- "PhotoModeler Training" instructed by *Dan Mills* (Las Vegas, NV, 2020)
  
- "Advanced HVE: Parts I & II" virtual *HVE* Forum presented by *Anthony D. Cornetto, P.E., President* (virtual conference, 2021)

## **RESEARCH**

- Mar 2018      Performed and participated in instrumented oblique lateral minor impacts involving human female subjects and instrumented Hybrid III ATDs at angles of 45°, 60°, and 90° using 2005 to 2007 Toyota Camrys and Corollas in Las Vegas, NV.

- Jun 2018 Performed and participated in instrumented car-to-car rear-end impacts with human subject using 2005 to 2007 Toyota Camrys and Corollas in Las Vegas, NV.
- Jan 2019 Performed and participated in instrumented remote driver broad-side rollover collision between a Tahoe and Grand Marquis, a multiple vehicle rear-end impact with a Town car, motorcycle and Prius, and yaw testing with a Suburban in Glendale, AZ.
- Jan 2019 Performed and participated in rear-end impacts between an Impala and Grand Marquis with instrumented volunteers in Glendale, AZ.
- Jan 2020 Performed and participated in rear-end impacts between a 2012 Hyundai Genesis Coupe and a 1999 BMW 528i with instrumented volunteers in Glendale, AZ.
- Jan 2021 Performed and participated in impacts between a 2015 Hyundai Elantra and a 2015 Chevrolet Sonic with instrumented volunteers in Glendale, AZ.