COLLISION AND INJURY DYNAMICS 2275 W. 190th Street, Torrance, CA 90504 • 310.414.0449 • www.ci-dynamics.com

BEAU LEBLANC, BSME
Senior Consultant, Partner
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Professional Competence

Forensic engineer specializing in transportation related accident reconstruction and vehicle system analysis. Consulting activities include accident reconstruction, computer simulation of automobile, truck, motorcycle, bicycle and pedestrian collisions, and Crash Data Retrieval. Research activities include vehicle crash testing and analysis, as well as testing of vehicle components including seats and restraints. Additional research includes survey and analysis of vehicle components and collision pulse modeling. Specialized knowledge includes advanced video editing and encoding, and photogrammetry.

Education and Certification

Bachelor of Science in Mechanical Engineering
- University of Southern California; 2009

Bachelor of Arts in Management Engineering
- Claremont McKenna College; 2009

EIT No. 131529, California
- Board for Professional Engineers, Land Surveyors, and Geologists; 2008

ACTAR No. 3146
- Accreditation Commission for Traffic Accident Reconstruction; 2016

SAE Accident Reconstruction Certification
- SAE International; 2018

M1 Motorcycle Endorsement
- California Department of Motor Vehicles; 2006

Training

Ego-Localization for Autonomous Driving Workshop; 2022

I.DRR Users Forum; 2017, 2021, 2022

EDR Summit; 2020

Ride To Live Motorcycle Training Course; 2018

Powered Industrial Trucks Training & Operator Certification; 2016

California Association of Accident Reconstruction Specialists
- ABS and Non-ABS Deceleration Rates on Different Surfaces; 2022
- Understanding and Using Ignition Cycles in Your Investigation; 2022
- Case Studies and Research on Pedal Misapplication; 2021
- How Drivers Respond in Real World Crash & Near Crash Scenarios; 2020
- Utilizing Video Evidence in Traffic Investigations; 2019

SAE International
- Accident Reconstruction, the Autonomous Vehicle and ADAS; 2022
- Advanced Applications of Heavy Vehicle EDR Data; 2021
- Injuries, Anatomy, Biomechanics Federal Regulation; 2018
- Vehicle Crash Reconstruction: Principles and Technology; 2018
- Fundamentals of Vehicle Fire Investigation; 2018
- Applied Vehicle Dynamics; 2016
- Vehicle Frontal Crash Occupant Safety and CAE; 2014
- Introduction to Brake Control Systems: ABS, TCS, and ESC; 2013
- Applying Automotive EDR Data to Traffic Crash Reconstruction; 2013
- Driver Distraction from Electronic Devices; 2012
- Accessing and Interpreting Heavy Vehicle Event Data Recorders; 2012

World Reconstruction Exposition; 2016
- Visual Amodal Perception
- Motorcycle Reconstruction
- Emergency Vehicle Reconstruction
- Rollovers
- Commercial & Consumer Tires

NUCPS "Advanced Crash Reconstruction Utilizing Human Factors Research" Seminar by Jeffrey Muttart, Ph.D.; 2015

CDR User's Summit; 2013, 2015

HVE Forum; 2012, 2015

"Basic Tire Mechanics & Investigation," and "Tire Forensic Analysis" Seminars by Thomas R. Giapponi; 2014

PC-Crash Live Workshop; 2014

Streetmasters Precision Cornering Workshop; 2014

Bendix Air Brake School; 2014

IPTM Investigation of Motorcycle Crashes; 2013

California Superbike School Levels I & II; 2012

Motorcycle Safety Foundation
- Advanced RiderCourse; 2011
- Basic RiderCourse; 2006

PC-Crash Essentials & Animation Skills; 2011

ARC-CSI Crash Conference; 2010

Bosch/Vetronix CDR System Technician & Data Analyst Certification Course; 2008

Professional Experience

2011 – Present — Collision Injury Dynamics, Inc.
Investigation and analysis of traffic accidents and mechanical failure claims involving automobiles, motorcycles, commercial vehicles and machinery, public transportation, bicycles and pedestrians. Advanced vehicle, evidence and roadway documentation using 3D laser scanned point clouds. Validated and published innovative methodology for photogrammetric evidence modeling using 3D laser scanned point clouds. Designed and participated in testing regarding bicycle approach angle to light rail track on city streets. Thorough knowledge of passenger and commercial vehicle mechanical and on-board data systems, including public transportation surveillance systems and logistics fleet management systems. Consultation with attorneys, insurers, and claims investigators.

2007 – 2011 — Collision Research and Analysis, Inc. (Research Engineer)
Participated in the analysis, reconstruction, and presentation (including computer simulation and trial preparation) of over two hundred fifty collisions. Conducted numerous inspections, documentation, and analysis of accident vehicles and accident scenes, including laser total station operation. Participated in numerous tests to evaluate collision performance of safety related components including seats, restraint systems, and passenger door structures. Researched rear-impact collision pulses and occupant kinematics. Participated in motorcycle brake testing. Surveyed and analyzed various aspects of automobile seat design. Analyzed video from surveillance cameras and testing using advanced editing and encoding applications. Worked directly with biomechanics, restraints, metallurgy, highway design and barrier experts, as well as vehicle manufacturers' technical personnel.

Organizations

Society of Automotive Engineers
Accreditation Commission for Traffic Accident Reconstructionists
National Association of Fire Investigators
Southwestern Association of Traffic Accident Investigators
California Association of Accident Reconstruction Specialists
American Motorcyclist Association
Porsche Club of America

Forensic Qualifications

Testimony in Superior Courts of California

Biographical Sketch

Mr. LeBlanc was born in the San Francisco Bay Area in 1981. He swam competitively starting in elementary and through his high school years. From a young age, he pursued his interests in automobiles and bicycles and spent time building and maintaining cars, motorcycles, and bicycles during his time outside of the pool. He has earned a B.A. from Claremont McKenna College and a B.S. in Mechanical Engineering from the University of Southern California. While a student at USC, he was a member and officer of the Formula SAE team, where he and his team designed and built an open-wheel racecar for competition against universities around the world.

In the summer of 2004, Mr. LeBlanc lived in Orem, Utah interning with Charles Warner, a founding father of the industry at Collision Safety Engineering. There he learned the core concepts of accident investigation and analysis, barrier crash testing, exhibit production and jury communication. In early 2007, he took a position as Research Engineer at Collision Research and Analysis in their Torrance, California office. He spent the next four years concurrent with his engineering education performing accident reconstruction of all types, including a great number of multiple rollover collisions. At Collision Research and Analysis, he also studied and performed several tests in the area of seat performance in rear-end collisions and rollover events. Since 2011, he has been a testifying consultant at Collision and Injury Dynamics, Inc.

Mr. LeBlanc is an avid hiker, road cyclist, and alpine skier. He has ascended most of the peaks in the Angeles National Forest. He has an affinity for steel road bicycles and his small-but-growing collection of them. He is an automobile and motorcycle aficionado and keeps his commute interesting either in an old car or on two wheels.

Reports and Publications

Quantifying Engine Braking for Various Common Street Motorcycles, H. Jansen, B. LeBlanc, C. Wilhelm, T. Shaw, A. Lowi, SAE 2020-01-0880, April 14, 2020.

Close-Range Photogrammetry with Laser Scan Point Clouds, M. Callahan, B. LeBlanc, R. Vreeland, G. Bretting, SAE 2012-01-0607, April 16, 2012.