SKE Forensic Consultants, LLC



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PARTNER (B.E. Mech. Eng.)

CURRICULUM VITAE

CURRENT POSITION:

Partner at SKE Forensic Consultants LLC, a private consulting firm specializing in the analysis and reconstruction of traffic accidents.

CERTIFICATIONS/QUALIFICATIONS:

Court qualified as an Accident Reconstruction Expert Witness and an Expert in Vehicle Mechanical Systems in the following states:

- New York Supreme Court
- New Jersey Superior Court

Fully Accredited Traffic Accident Reconstructionist from the Accreditation Commission for Traffic Accident Reconstructionists – ACTAR #2228 (2010)

Certified as a Bosch Crash Data Retrieval Technician and Analyst – (CSI 2009) Airbag sensor and crash recording data technology

Crash Data Retrieval Analysis and Applications Update Course – (Crash Data Specialists 2012)

Crash Data Retrieval Technician Level 2 Certification Course – (CSI 2015)

Crash Data Retrieval Certified Trainer Mentor Course – (CSI 2015)

Crash Data Retrieval Analysis and Applications Update Course – (Crash Data Specialists 2017)

Certificate of Training Detroit Diesel Diagnostic and DDEC Reports - Tactical Training Strategies – August 22, 2011

Certificate of Training Bendix Heavy Duty Vehicle Air Brake Systems and Components – Bendix Spicer Foundation Brake LLC – September 2011 & September 2017

EDUCATION:

Ramapo High School, Franklin Lakes, New Jersey

High School Diploma, 1994

Stevens Institute of Technology, Hoboken, New Jersey

• Bachelor of Engineering, Mechanical Engineering, 1999

Northwestern University, Traffic Institute, Evanston, Illinois

- Certificate Accident Investigation I & II 2009
- Certificate Traffic Accident Reconstruction I 2009

PROFESSIONAL EXPERIENCE:

Jaguar Land Rover North America (1999-2007)

Product Compliance Engineer

 Trained at UK Whitley Engineering Centre for three months. Acted as the manufacturer representative for U.S.-based compliance testing including fuel and emissions testing as well as safety and crash testing. Responsibilities included government reporting on recalls and defects in accordance with 49 CFR Part 573. Development of reporting system to meet NHTSA's Transportation Recall Enhancement, Accountability and Documentation (TREAD) Act, and the Concern Driven Reporting (CDR) System for Ford Motor Company.

Product Investigation

 Responsibilities included internal review of critical concerns including collisions, rollovers, fires and other serious claims of vehicle defect. Investigate all powertrain related issues within the North American region by tracking warranty claims, reports from field personnel, and through testing and diagnosis of components and vehicles. Communicate directly with UK powertrain engineering to quickly resolve issues and implement fixes.

Field Service Engineer - Northern Region

 Responsibilities included investigation, diagnosis and resolution or repair of advanced or critical vehicle issues to assist dealers, enhance customer satisfaction and report findings to engineering for resolution.

John Desch Associates, Inc., Accident Reconstruction and Traffic Engineering

Director, Vehicle Systems Analysis (2007-2015)

- Directed efforts relating to the investigation of vehicle related defects through mechanical inspection and electronic data collection. Performed in-depth analysis of vehicle communications systems and analysis, and testing of vehicle performance capabilities and limitations.
- Instituted the use of crash data retrieval from passenger vehicle and commercial vehicle control modules. Analyzed hundreds of accident reconstruction projects including collision severity analysis, force/energy calculations, airborne trajectories, and vehicle rollovers. Provided clients with expert reports and testimony in accident reconstruction matters.

SKE Forensic Consultants LLC, Accident Reconstruction Experts

Partner (2019 – Present) Senior Associate (2015 - 2019)

 Special expertise includes vehicle mechanical inspection and electronic data collection, crash data retrieval from passenger vehicles and commercial vehicle ECMs, proficiency in HVE-2D collision simulation modeling programs, crash test data evaluations, and site and vehicle inspections/testing. Qualified as an accident reconstruction expert in New Jersey Superior Court and New York Supreme Court.

PROFESSIONAL SOCIETIES/MEMBERSHIPS:

SAE Society of Automotive Engineers (Member Status)

ASME American Society of Mechanical Engineers

NYSTARS New York Statewide Traffic Accident Reconstruction Society **NJAAR** New Jersey Association of Accident Reconstructionists

SPECIALIZED ACCIDENT RECONSTRUCTION/RELATED TRAINING:

NJAAR Seminars

 Everything You Need To Know About Yaw Marks Sayreville, New Jersey – November 21, 2014

NYSTARS Seminars

Heavy Vehicle EDRs
 Valhalla, New York – November 19, 2013

2006 F³T² Combined Conference (12 Hosting Organizations) (CATAIR – MATAI – PSFM – SEARS – IAARS – NAPARS – SCAARS – SOARS – NYSTARS – SATAI – WATAI, etc.)

 Crash Tests, Dynamic Deceleration Testing, Tire-Road Friction Related to Drag Sleds, Applicability of Crush Analysis Formulas, Nighttime Perception/Reaction Test, and Highway Sightlines for Accident Reconstruction- Houston, TX - September 17-21, 2006.

2007 Combined Conference/Investigating Eccentric Collisions (NYSTARS - NJAAR - NAPARS - NATARI - MATAI)

• Occupant Kinematics in a Rotational Collision, Injury Patterns, Crash Data Retrieval (CDR) Up-dates, Eccentric Crash Testing - Binghamton, New York – October 24-26, 2007.

2008 DriveCam Academy Training Seminar

 DriveCam Overview, Trigger Settings, Privacy Rights, Tampering Resistance, Understanding Video Clips, Event Analysis - Newark, New Jersey - March 13, 2008.

2008 Combined Conference (5 Hosting Organizations) (NJAAR - NYSTARS - NAPARS - NATARI - MATAI)

 Issues in lateral pole collisions, commercial vehicle event data recorders, critical speed yaw special situations, alcohol/cannabis/stimulants/opiates and driving, airborne analysis, lateral pole crash testing and test data review – Atlantic City, New Jersey – October 15-17, 2008.

2009 Combined Conference (6 Hosting Organizations) (NAPARS - NATARI - MATAI - NJAAR - NYSTARS - PSFM)

 Heavy vehicle crash reconstruction, commercial motor vehicle electronic data sources and data extraction techniques, analysis of Detroit Diesel (DDDL) reports and MCSAP Internet resources, Conservation of Linear Momentum restrictions regarding heavy vehicles versus passenger vehicle collisions, air brake adjustment and stopping ability of heavy trucks, combining aerial photograph and forensic mapping data, tractor-trailer crash testing – Ocean City, Maryland – October 7-9, 2009.

2010 Combined Conference (6 Hosting Organizations) (MDATAI – NAPARS – NJAAR – NYSTARS – NATARI – PSFM)

Trailer Underride Collision Reconstruction, Side Underride Analysis, Commercial Vehicle Conspicuity System Requirements - Federal MCSAP Regulations, Investigation and Documenting Conspicuity in Side Underride Crashes, Principles of Headlights, Sudden Acceleration Incidents - A Mechanical Perspective, CDR Update Information, Truck Rollover Investigation and Reconstruction, Equivalent Barrier Speed - Kinetic Energy Equivalent Speed - Delta-v and The First Law of Thermodynamics, Reconstructing a Nighttime Crash, Low Light Forensic Photography - Documentation of Evidence at Night, Applications of Aerial and Satellite Imagery in Traffic Accident Reconstruction, Mapping and Diagramming - Ocean City, Maryland - October 6-8, 2010.

2011 Engineering Dynamics Corporation HVE Forum

 Certificate in Simulation of Motor Vehicle Accident Reconstruction using HVE 2D including EDSMAC, EDSMAC4, EDVTS & EDSVS, – Physics based program and high level course in prediction of collision events including vehicles, barriers, vehicles and objects in motion – Phoenix, Arizona – February 2011.

2011 NATARI - MATAI - NJAAR - NYSTARS - PSFM Conference

 Focus on Vehicle and Pedestrian Bicycle Collisions with instrumented pedestrian dummies and event data recorder extraction from passenger vehicles by the Tulsa University Crash Reconstruction Consortium. One day course in Forensic Photography in Accident Reconstruction
 – Harrisburg, Pennsylvania – October 4-7, 2011.

2012 NAPARS - NATARI - MATAI - NJAAR - NYSTARS Conference

• Investigating Motorcycle Collisions including motorcycle nomenclature, at scene motorcycle evidence, motorcycle crash testing, human factors related to motorcycle accident reconstruction and rotational mechanics - Fishkill, New York – October 17-19, 2012.

2013 NJAAR - NAPARS - NATARI - NYSTARS - MDATAI Conference

Basic and Advanced Concepts Using Conservation of Linear Momentum. Secondary impacts
within the collision circle, Advanced Momentum Concepts, effects of tire composition on
coefficient of friction and stopping distances, driving under the influence of drugs, new crash
avoidance technology, vehicle crashworthiness and occupant biomechanics
– Atlantic City, New Jersey – October 9-11, 2013.

2014 NAPARS - NATARI - MATAI - NJAAR - NYSTARS Conference

- Collision Investigation and Reconstruction, Crash Damage
- Energy, Use of UAVs. Mobile Forensics, Stiffness Coefficients, Researching and Stiffness Values, Crush Energy/COLM, Memory Formation, Digital Forensics of Vehicle Infotainment Systems and Heavy Trucks Portland, Maine September 10-12, 2014.

2015 CDR Summit

 New vehicle technologies, clearing of ACM's, what is it and how does it work, GM Ignition switch failures and the associated CDR data, Toyota event data recording prioritization, review of CDR case law in North America, data mining the NHTSA NASS CDR database – Houston, Texas - January 26-28, 2015

2016 SAE HVEDR

- Accessing and Interpreting Heavy Vehicle Event Data Recorders.
- 35-hour certificate course on the identification, extraction and analysis of heavy vehicle engine control module data for use in accident reconstruction – Charlotte, North Carolina – May 17-20, 2016

2018 CDR Summit

 New EDR technologies, Infotainment, On-Star data, Subaru EDR data, Tesla Autopilot and EDR data, Detroit Diesel ECM EDR, Motorcycle EDR, Bendix Wingman, and multiple case studies – Houston, Texas – March 5-7, 2018

2018 Combined Conference (5 Hosting Organizations) (NAPARS – NATARI – MATAI – NJAAR – NYSTARS)

 Investigating Pedestrian Collisions – History of pedestrian crash testing and reconstruction, pedestrian crash testing, injury patterns, perception response time, nighttime perception, pedestrian distraction, review of eye tracking software, review of crash test results – Lake George, New York – October 17-19, 2018

PIX4D Software Training Class presented by Forensic Mapping Solutions

Morris County Police Academy, October 22 -24, 2018

PRESENTATIONS/GUEST SPEAKER

Congdon Flaherty O'Callaghan, Reid, Donlon, Travis and Fishlinger – CLE Course: Introduction to Accident Reconstruction, Traffic Engineering & Premises Liability - 2011

Zirulnik, Sherlock & DeMille – Presentation in Accident Reconstruction, Immediate Evidence Collection and Event Data Recorders and Evidence Documentation in Passenger Vehicles and Heavy Truck ECMs - 2011

Capehart & Scatchard – CLE Course: Introduction to Accident Reconstruction, Immediate Evidence Collection and Event Data Recorders and Evidence Documentation in Passenger Vehicles and Heavy Truck ECMs - 2014

Viscomi & Lyons – CLE Course: Introduction to Accident Reconstruction, Immediate Evidence Collection and Event Data Recorders and Evidence Documentation in Passenger Vehicles and Heavy Truck ECMs – 2015

Highland Group – Presentation on Immediate Evidence Collection, Event Data Records, and methods of evidence collection and preservation – 2019