

Curriculum Vitae

ERIC S. DEYERL

Specialized Professional Competence

Mechanical Engineering
Failure Analysis of Mechanical Systems
Accident Reconstruction

Vehicle Dynamics Structural Analysis Mechanical Testing

Education

Master of Science, Mechanical Engineering, University of California Los Angeles (1992) Bachelor of Science, Aerospace Engineering, University of California Los Angeles (1990)

Professional Experience

Mechanical Engineer

Dial Engineering (2008 to present)

Mechanical Engineer

Quan, Smith & Associates (1997 to 2007)

Engineer / Senior Engineer / Managing Engineer

Failure Analysis Associates (1991 to 1997)

Teaching Assistant

University of California Los Angeles (1990 to 1991)

Registration

Registered Professional Mechanical Engineer (1994)
State of California, #M29157
Traffic Accident Reconstructionist (2004)
A.C.T.A.R., #1443
Certified XL Tribometrist (2002)

Professional Affiliations

Member, American Society of Mechanical Engineers

Member, SAE International

Member, National Association of Professional Accident Reconstruction Specialists

Member, Society of Accident Reconstructionists

Member, Southwestern Association of Technical Accident Investigators

Member, American Society for Testing and Materials

Committee F13 on Pedestrian/Walkway Safety and Footwear

Member, American Society of Safety Professionals

Continuing Education

- "Symposium on EDR Research and Training," National Association of Professional Accident Reconstruction Specialists (2025)
- "Response User Forum," Driver Research Institute (2025)
- "EDR User Summit," Crash Data Group (2024)
- "World Reconstruction Exposition (WREX)," (2023)
- "Recon 3D Training Course," Recon 3D, Inc. (2023)
- "Motorcycle Collision Reconstruction," Lightpoint Learning (2022)
- "Reverse Projection Camera Match Overlay," iNPUT-ACE (2022)
- "Calculating Speed from Video," iNPUT-ACE (2022)
- "Case Studies and Research on Pedal Misapplication," Seminar, CAARS (2022)
- "Chip-Level Data Recovery: Understanding the Techniques" Seminar, NAPARS Joint Conference (2020)
- "Using Freightliner New Cascadia ECM Data in Accident Reconstruction," Seminar, NAPARS Joint Conference (2020)
- "Motorcycle Leaning, Turning, and Swerving," Seminar, NAPARS Joint Conference (2020)
- "EDR Summit," Crash Data Group/Collision Safety Institute (2020)
- "I.DRR User Forum," Crash Safety Solutions, LLC (2020)
- "Advanced Applications of Heavy Vehicle EDR Data," SAE International (2019)
- "Virtual CRASH: Use and Applications," vCRASH, Americas, Inc. (2019)
- "HVE Forum," Engineering Dynamics Corp. (2019)
- "Accident Reconstruction, The Autonomous Vehicle and ADAS," SAE International (2019)
- "Forensic Video Analysis Workflow Training," iNPUT-ACE (2018)
- "Applying Automotive EDR Data to Traffic Crash Reconstruction," SAE International (2017)
- "UAS Flight Training and Ground School and Introduction to Pix4D," Forensic Mapping Solutions, Inc. (2017)
- "Event Data Recorder Summit," Collision Publishing (2017)

Continuing Education (cont.)

- ARC-CSI Crash Conference, Accident Reconstruction Communications Network/Collision Safety Institute (2016)
- "World Reconstruction Exposition (WREX)," motorcycle crash test team member and conference attendee (2016)
- "I.DRR User Forum," Crash Safety Solutions, LLC (2016)
- "Accessing and Interpreting Heavy Vehicle Event Data Recorders," SAE International (2015)
- "Walkway Auditor Training Course ASTM F2948," FORCON International (2015)
- "HVE Forum," Engineering Dynamics Corp. (2015)
- "Forensic Tire Examination," TRGtech Tire Consulting (2014)
- "Tire Mechanics and Inspection," TRGtech Tire Consulting (2014)
- FARO Laser Scanner Training Program, FARO (2014)
- ARC-CSI Crash Conference, Accident Reconstruction Communications Network/Collision Safety Institute (2014)
- "GPS Forensic Investigations," Institute of Police Technology and Management, University of North Florida (2013)
- "Crash Data Retrieval Summit," Collision Publishing (2013)
- "Human Factors in Traffic Crashes," Northwestern University Center for Public Safety (2012)
- "Crash Data Retrieval Data Analysts Certification Course," Collision Safety Institute (2012)
- "HVE Forum," Engineering Dynamics Corp. (2012)
- "CXLT Certification Program," Excel Tribometers, LLC (2011)
- "Photomodeler 2011 Collision Investigation Course," Eos Systems (2011)
- "Crash Data Retrieval Summit," Collision Publishing (2011)
- "HVE Forum," Engineering Dynamics Corp. (2010)
- "Crash Data Retrieval Summit," Collision Publishing (2010)
- "Crash Data Retrieval System Operator's Certification Course," Collision Safety Institute (2008)
- "Crash Data Retrieval User's Conference" (2007)

Continuing Education (cont.)

"HVE Forum," Engineering Dynamics Corp. (2006)

"Crash Data Retrieval User's Conference" (2006)

"Crash Data Retrieval System Operator's Certification Course Update 2005," Collision Safety Institute (2005)

"HVE Forum," Engineering Dynamics Corp. (2004)

"Biomechanics of Slips and Falls," ASTM Committee F-13 on Pedestrian/Walkway Safety and Footwear (2003)

"Crash Data Retrieval System Operator's Certification Course," Collision Safety Institute (2003)

"English XL Certification Course," William English, Inc. (2002)

"Theoretical and Applied Vehicle Dynamics," Engineering Dynamics Corp. (2001)

Society of Automotive Engineers Professional Development Program Seminars:

"Braking Performance of Heavy Commercial Vehicles" (2000)

"Accident Reconstruction: State-of-the-Art" (1999)

"Passenger Car Rollover: Cause & Prevention" (1999)

"Heavy Vehicle Underride Protection" (1997)

"Low Speed Rear Impact Collisions" (1994)

"Side Impact Protection: Meeting the Challenge" (1994)

"Vehicle Rollovers: An Update of Current Issues" (1993)

"Accident Simulations," Engineering Dynamics Corp. (1993)

"Traffic and Transportation Seminar," Engineers Review Inc. (1993)

San Bernardino County Sheriff's Department Seminar on Skid Recognition and Crash Evaluation (1993)

"Accident Reconstruction," Engineering Dynamics Corp. (1991)

Motorcycle Operation Training

California Superbike School, Level 4 (2025)

California Superbike School, Level 3 (2020)

California Superbike School, Level 2 (2020)

Motorcycle Operation Training (cont.)

California Superbike School, Level 1 (2014)

MotoVentures Two-Day Off-Road Course (2013)

"Experienced Rider Course," Motorcycle Safety Foundation (2009)

Publications

- "Days Between Vehicle Manufacture and Sale for Use in EDR Ignition Cycle Analysis," Accident Reconstruction Journal, March/April 2025. (with I. Hong and D. Little)
- "Vehicle Energy Dissipation during Curb Traversal," SAE Technical Paper 2022-01-5002, January 2022. (with I. Seabury)
- "Computer Simulation of a Vehicle-Versus-Dummy Collision via GATB," HVE White Paper # WP-2018-3, HVE Forum, 2018. (with M. Cheng)
- "Eleven Instrumented Motorcycle Crash Tests and Development of Updated Motorcycle Impact-Speed Equations," SAE Paper 2018-01-0517, April 2018. (with L. Peck, W. Bartlett, J. Manning, C. Dickerson)
- "The Effect of Tire Pressure on the Deceleration of a Motorcycle Under Application of the Rear Brake Only," Accident Reconstruction Journal, July/August 2017. (with L. Peck and N. Rose)
- "Evaluation of the Automatic Transmission Model in HVE Version 10.1," HVE White Paper # WP-2015-4, HVE Forum, 2015.
- "Two-Dimensional Collision Simulations of Low-Speed Crash Tests," SAE Paper 2013-01-0793, April 2013. (with L. Cheng, J. Gatti)
- "Evaluation of DyMESH Wheel Impact in a Rollover Collision," HVE White Paper # WP-2013-5, HVE Forum, 2013. (with L. Cheng, M. Cheng)
- "Computer Simulation of Steer-Induced Rollover Events Via SIMON," SAE Paper 2011-01-1122, April 2011. (with L. Cheng)
- "Evaluation of the Automatic Transmission Model in HVE Version 7.1," HVE White Paper # WP-2010-3, HVE Forum 2010. (with M. Fitch)
- "Computer Simulation of Pavement Edge Traversal," SAE Paper 2009-01-0464, April 2009. (with L. Cheng)
- "Computer Simulation of Staged Motorcycle-Vehicle Collisions Using EDSMAC4," Accident Reconstruction Journal, July/August 2007. (with L. Cheng)
- "Presentation of HVE Validation Studies," HVE White Paper #2006-1, HVE Forum, 2006. (with F. Bayan, A. Cornetto, and J. Anderson)

Publications (cont.)

- "Low Speed Collinear Impact Severity: A Comparison between Full Scale Testing and Analytical Prediction Tools with Restitution Analysis," SAE Paper 2002-01-0540, March 2002. (with A. Cipriani, F. Bayan, M. Woodhouse, A. Cornetto, A. Dalton, C. Tanner, and T. Timbario)
- "Creation of Three-Dimensional Terrain for Use in Computer Animation," SAE Paper 980020, International Congress and Exposition, February 1998. (with M. McCall)
- "Failure Analysis of Heavy Truck Trailer Axle Tubes," Proceedings of the International Conference on Experimental Model Research and Testing of Thin-Walled Structures, July 1997. (with R. Kadlec, R. Westmann, R. Carnahan, and M. Haghi)
- "Occupant Dynamics in Low Speed Collisions: Crash Testing and Mathematical Modeling," Low Speed Collision TOPTEC, SAE, Richmond (Vancouver), B.C., Canada, August 1996. (with L. Cheng, R. Kelkar, S.M. Werner, and F.P. Bayan)
- "Validity of Flight Recorder Data in the Reconstruction of a Boeing 747 Accident During Taxi on Snow and Ice-Affected Pavement," Proceedings, International Society of Air Safety Investigators, October 1994. (with F. Bayan and B. Ross)
- "Brake Temperature and Automobile Low Speed Stopping Performance," Accident Reconstruction Journal, July/August 1994. (with F. Bayan and B. Shiu)
- "Tire Mark Analysis in a Case of Unintended Acceleration," Accident Reconstruction Journal, March/April 1994. (with F. Bayan)