

Curriculum Vitae

LOUIS R. PECK, P.E.

Education

Master of Science, Mechanical Engineering, Worcester Polytechnic Institute (2007) Bachelor of Science, Mechanical Engineering, California State University Fresno (2005)

Professional Experience

Forensic Engineer
Axiom Forensic (2018 to present)
Forensic Photogrammetrist

Lightpoint Scientific (2012 to present)

Forensic Engineer

Dial Engineering (2014 to 2017)

Collision Reconstructionist

S.D. Lyons, Inc. (2007 to 2014)

Collision Reconstructionist

True Forensics (2004 to 2007)

Research Assistant

Worcester Polytechnic Institute/NHTSA (2006 to 2007)

Registration

Registered Professional Mechanical Engineer State of California, #M38211 Traffic Accident Reconstructionist A.C.T.A.R., #1663

Classes Developed / Instructed

Reconstruction and Analysis of Motorcycle Crashes
Society of Automotive Engineers
Motorcycle Crash Reconstruction (2020)
Northwestern University
Advanced Photogrammetry for Collision Reconstruction
Lightpoint Scientific, LLC

Professional Affiliations

Member, A.C.T.A.R. Governing Board of Directors

Member, Photomodeler Ambassador

Member, SAE International

Member, National Association of Professional Accident Reconstruction Specialists

Member, California Association of Accident Reconstruction Specialists

Member, American Motorcyclist Association

Tau Beta Pi, National Engineering Honor Society

Continuing Education

"An Overview of Collision Reconstruction / Investigation using Crash Data Retrieval Event Data," California Association of Accident Reconstruction Specialists, Online, 2020.

California Superbike School, Level 2 & 3, Willow Springs, California, 2020.

"Utilizing Video Evidence in Traffic Investigations," California Association of Accident Reconstruction Specialists, Fontana, California, 2019.

"Virtual CRASH: Use and Applications," Virtual CRASH, Van Nuys, California, 2019.

"Fall Conference," California Association of Accident Reconstruction Specialists, Lake Tahoe, California, 2018.

"2018 EDR Summit," Crash Data Group, Speaker and Attendee, Houston, Texas, 2018.

"Digital Forensics of Heavy Vehicle Event Data Recorders," The University of Tulsa, Tulsa, Oklahoma, 2017.

"World Reconstruction Exposition," Motorcycle Crash Test Director, Speaker, and Attendee, Orlando, Florida, 2016.

"Damage Energy Methods," California Association of Accident Reconstruction Specialists, Glendora, California, 2016.

"HVE Forum," Engineering Dynamics Corporation, Austin, Texas, 2015.

Accident Simulation, Engineering Dynamics Corporation, Burbank, California, 2015.

California Superbike School, Level 1, Willow Springs, California, 2014.

ARC-CSI Crash Conference, Accident Reconstruction Communications Network/Collision Safety Institute, Las Vegas, Nevada, 2014.

California Association of Accident Reconstruction Specialists Annual Conference, Lake Tahoe, California, 2012.

Penguin Road Racing School - Advanced School, Loudon, New Hampshire, 2012.

Continuing Education (Continued)

"Crash Data Retrieval Analyst," Collision Safety Institute, Worcester, Massachusetts, 2012.

"Crash Data Retrieval Technician Level 1 & 2," Collision Safety Institute, Worcester, Massachusetts, 2012.

"PhotoModeler for Collision Reconstruction," DCM Technical Services, Las Vegas, Nevada, 2010.

ARC-CSI Crash Conference, Accident Reconstruction Communications Network/Collision Safety Institute, Las Vegas, Nevada, 2009.

Southwestern Association of Technical Accident Investigators, Annual Conference, Laughlin, Nevada, 2009.

"Human Factors for Traffic Crash Reconstruction," Accident Dynamics Research Center, Spartanburg, South Carolina, 2008.

Accelerometer and Skid Test Training Course, Vericom Computers, Inc., Derry, New Hampshire, 2008.

"Traffic Accident Reconstruction II," Northwestern University Traffic Institute, Evanston, Illinois, 2007.

"Traffic Accident Reconstruction I," Northwestern University Traffic Institute, Evanston, Illinois, 2007.

"Vehicle Dynamics," Northwestern University Traffic Institute, Evanston, Illinois, 2007.

"Accident Investigation II," Northwestern University Traffic Institute, Evanston, Illinois, 2007.

"Accident Investigation I," Northwestern University Traffic Institute, Evanston, Illinois, 2007.

"Advanced Collision Diagramming-Including 3D Animation," Visual Statement, Inc., Massachusetts, 2005.

ARC-CSI Crash Conference, Accident Reconstruction Communications Network/Collision Safety Institute, Las Vegas, Nevada, 2005.

"Basic Rider Course," Motorcycle Safety Foundation, Fresno, California, 2004.

Publications

"Exploration and Validation of the Ducati Data Analyzer," Accident Reconstruction Journal, January/February 2018.

"Eleven Instrumented Motorcycle Crash Tests and Development of Updated Motorcycle Impact-speed Equations," SAE Technical Paper No. 2018-01-0517, 2018. (with J. Manning, W. Bartlett, C. Dickerson, and E. Deyerl)

"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 E. Deyerl and N. Rose)

"Motorcyclists' Glance Behaviors at Unsignalized Intersections: Left Turn across Path," Transportation Research Board 96th Annual Meeting Compendium of Papers, Technical Paper No. 17-06688, 2017. (with J. Muttart, W. Bartlett, T. Zafian, Y. Yamani, C. Kauderer, D. Fisher, S. Samuel, and S. Dinakar)

"The Accuracy of an Optimized, Practical Close-Range Photogrammetry Method for Vehicular Modeling," SAE International Journal of Transportation Safety Paper 2016-01-1462, April 2016. (with M. Cheng)

"Motorcycle Sliding Friction for Accident Investigation," Proceedings of the 10th International Motorcycle Conference, Institute for Motorcycle Safety, Essen, Germany, pp. 62-78, 2014. (with W. Focha, and T. Gloekler)

"Glancing and Stopping Behavior of Motorcyclists and Car Drivers at Intersections," Transportation Research Record: Journal of the Transportation Research Board, No. 2265, Transportation Research Board of the National Academies, Washington, DC., 2011, pp. 81-88. (with J. Muttart, S. Guderian, W. Bartlett, L. Ton, C. Kauderer, D. Fisher, and J. Manning)

"Influence of Riding Experience on Glance Behavior, Brake Response Time and Deceleration Rates by Drivers and Motorcyclists," Sixth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design, Cologne, Germany, pp. 461-468, 2014. (with J. Muttart, D. Fisher, C. Kauderer, W. Bartlett, S. Guderian, L. Ton, and M. Muttart)

"Dynamic Failure Properties of the Porcine Medial Collateral Ligament Bone Complex for Predicting Injury in Automotive Collisions," The Open Biomedical Engineering Journal, Vol. 4, pp. 77-84, 2010. (with K. Billiar, M. Ray)

"Validation of a New Finite Element Model for Human Knee Ligaments for Use in High Speed Automotive Collisions," 2009 Summer Bioengineering Conference, Lake Tahoe, CA, 2009. (with C. Silvestri, L.R. Peck, K.L. Billiar, M.H. Ray)

"Dynamic Failure Properties of the Porcine Medial Collateral Ligament: Predicting Human Injury in High Speed Frontal Automotive Collisions," M.S. Thesis, Worcester Polytechnic Institute, 2007.

"Pole Impact Analysis," (Software) True Forensics, 2007.

Publications (Continued)

"Low Speed Impact Analysis," (Software) True Forensics, 2005.

Presentations

"Eleven Instrumented Motorcycle Crash Tests and Development of Updated Motorcycle Impact-speed Equations," 2018 SAE World Congress, Detroit, 2018.

"Motorcycle Dataloggers and EDRs," 2018 EDR Summit, Houston, 2018.

"Modern Motorcycle Reconstruction Techniques," Institute of Police Technology and Management's Symposium on Traffic Safety, Orlando, 2017.

"Photogrammetry Methods for Collision Reconstruction," California Association of Accident Reconstruction Specialists, Vacaville/Glendale, 2016.

"Motorcycle Collision Reconstruction: PRT, Braking, and Sliding Friction," World Reconstruction Exposition, Orlando, 2016.

"The Accuracy of an Optimized, Practical Close-Range Photogrammetry Method for Vehicular Modeling," 2016 SAE World Congress, Detroit, 2018.

"Human Factors Research for Motorcycle Collision Reconstruction", Interactive Driver Response Research User Forum, San Diego, 2016.

"Forensic Photogrammetry," California State University, Los Angeles, 2015.

"Analyzing Low-Speed Impacts with EDR Data and Photogrammetry," New England Association of Fraud Investigators, Worcester, Massachusetts, 2015.

"Motorcycles: Fundamentals and Dynamics," "Motorcycle Inspection for Collision Reconstruction," and "Motorcycle Collision Reconstruction Techniques," Southwest Association of Technical Accident Investigators, Las Vegas, Nevada, 2015.

"Motorcycle Sliding Friction for Accident Investigation," Institute for Motorcycle Safety: 10th International Motorcycle Conference, Cologne, Germany, 2014.

"Photogrammetric Analysis of Crash Tests," National Association of Professional Accident Reconstruction Specialists Joint Conference, Portland, Maine, 2014.

"Motorcycle Sliding Friction," Accident Reconstruction Communications Network/Collision Safety Institute, Las Vegas, Nevada, 2014.

"Motorcycle Inspection for Collision Reconstruction," California Association of Accident Reconstruction Specialists Annual Conference, South Lake Tahoe, California, 2012.

"Motorcycle Sliding Friction: Literature Review and New Data," California Association of Accident Reconstruction Specialists Annual Conference, South Lake Tahoe, California, 2012.

Presentations (Continued)

"Motorcycle Rider Response Evaluation," Southwestern Association of Technical Accident Investigators' Spring Conference, Laughlin, Nevada, 2009.

"Low Speed Impacts," Connecticut Association of Auto Theft and Arson Investigators, Wilmington, Connecticut, 2009.

"Analyzing Automobile Collision Damage," Rhode Island State Police, Providence, Rhode Island, 2008.