



KURT DOUGLAS WEISS  
Collision Reconstructionist - Forensic Engineer

#### SPECIALIZED PROFESSIONAL COMPETENCE

Comprehensive Traffic Collision Reconstruction  
Event Data Recorder (EDR) Analysis  
Failure Mode Forensic Testing

Seat Belt Assembly Performance Evaluations  
Surveillance Video Analysis  
Occupant Kinematics

#### EMPLOYMENT

Mechanical Engineer  
Case Study Collision Science, LLC (2019 – present)  
Staff Engineer  
Automotive Safety Research, Inc. (1986 – 2019)

#### EDUCATION

Master of Science, Mechanical Engineering  
University of California Santa Barbara (1993)  
Bachelor of Science, Mathematical Sciences  
University of California Santa Barbara (1990)

#### PROFESSIONAL MEMBERSHIPS

Fellow, American Academy of Forensic Sciences (AAFS) since 2005  
Member, California Association of Accident Reconstruction Specialists (CA2RS) since 2004  
Member, National Association of Professional Accident Reconstruction Specialists (NAPARS) since 1996  
Member, Society of Accident Reconstructionists (SOAR) since 1995  
Member, SAE International, formerly Society of Automotive Engineers (SAE) since 1991  
Member, Southwestern Association of Technical Accident Investigators (SATAI) since 2011

#### ACCREDITATIONS

Accreditation Commission for Traffic Accident Reconstruction, ACTAR #1242

#### RESEARCH

"A Computer Program to Solve a System of Ten Equations that Model the Dynamics of a Two-Vehicle Collision," Master's Project, University of California at Santa Barbara, Department of Mechanical Engineering (1993)

OFFICERS/COMMITTEES

Annual Scientific Meeting of the American Academy of Forensic Sciences  
Section Program Chair, Engineering and Applied Sciences (2021)  
Section Program Chair, Engineering and Applied Sciences (2020)  
Section Track Chair, Engineering Sciences (2015)  
Section Chair, Engineering Sciences (2013)  
Invited Panelist, Engineering Sciences, Career Webinar (2013)  
Section Secretary, Engineering Sciences (2012)  
Section Track Chair, Engineering Sciences (2010)  
Section Program Chair, Engineering Sciences (2009)  
Section Program Chair, Engineering Sciences (2008)

*Journal of Forensic Sciences*

Guest Reviewer (2014)  
Guest Reviewer (2013)

CONTINUING EDUCATION

iINPUT-ACE Online Video Evidence Training Symposium (2020)  
EDR Summit (2020)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2020)  
“The Democratization of Video Evidence: Equipping Investigators with Modern Tools and Know-How,”  
iINPUT-ACE (2020)  
Winter Conference of the Southwestern Association of Technical Accident Investigators (2020)  
Muir, B *Toyota Safety Sense and Vehicle Control History*  
Reust, T *Performance Characteristics of Electric Scooter used by Bird, Lime, Lyft and Others*  
Fredericks, A (iINPUT-ACE) *Utilizing Video Evidence in Traffic Investigations*  
Focused web demonstration of iINPUT-ACE Video Investigation Software – part 2 (2019)  
“Capturing Crash Scene Details Best Practices,” FARO Technologies (2019)  
Focused web demonstration of iINPUT-ACE Video Investigation Software – part 1 (2019)  
Annual Conference of the California Association of Accident Reconstruction Specialists (2019)  
Summer Conference of the Southwestern Association of Technical Accident Investigators (2019)  
Carpenter N *Planar Collision Mechanics*  
Brown W *Tesla EDR and determining speed from video*  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2019)  
“Crash Data Retrieval for Law Enforcement,” Crash Data Group (2019)  
Winter Conference of the Southwestern Association of Technical Accident Investigators (2019)  
Muttart MD, J, Dinakar S *Human Factors of Nighttime Visibility, Acceleration, Lane Changes, and Backing*  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2018)  
CAARS Motorcycle Crash Testing (2017)  
EDR Summit (2017)

- Annual Scientific Meeting of the American Academy of Forensic Sciences (2017)
- “Advanced Photogrammetry for Collision Reconstruction,” Lightpoint Scientific (2017)
- “Next-Generation Mapping Technology: Crash and Crime Scenes from Field-to-Courtroom” (2016)
- Annual Conference of the California Association of Accident Reconstruction Specialists (2016)
- Fall Conference of the Southwestern Association of Technical Accident Investigators (2016)
- Shaw T *Examination and Analysis of Motorcycle and Bicycle Helmets*
- Wilhelm C *The Hazards of Railroad Tracks for Bicyclists*
- Jansen H *Bicycle and Motorcycle Stability*
- Bretting G *Collision Reconstruction Techniques for Bicycle and Motorcycle Collisions*
- Suway J *Documentation and Reconstruction of Night Time Accidents*
- Boone E *Drug Toxicology and Impaired Driving*
- “World Reconstruction Exposition (WREX),” (2016)
- Cybanski A *Vehicle Velocity Extraction from Witness Video*
- Vandiver W *Event Data Recorder Anomalies & Limitations: Can EDRs be Wrong?*
- Ruth R *Crash data Retrieval Update Nov 2015*
- Stevens DC *Vehicle Rollover Crash Testing Applied to Accident Reconstruction,*
- Reade MW *The Effects of Carry Distance, Takeoff Angles, Friction Values and Horizontal Speed Loss Upon First Ground Contact of Pedestrian (Cyclist) Crashes*
- Glynn C *Motorcycle and Speed Estimation Methods*
- Peck LR *Motorcycle Collision Reconstruction: PRT, Braking and Sliding Friction*
- Christopher Daly *Investigation of Emergency Vehicle Crashes*
- Pike JA *Listening to Injuries: What They Can Tell Us About Seating Location, Seatbelt Use and Accident Reconstruction*
- Spring Conference of the Southwestern Association of Technical Accident Investigators (2016)
- Child Seat-Identifying Misuse and Failures, FARO 3D Laser Scanning and its Uses in Crash Reconstruction, Update on HVEDR-Paccar and Hino Engines, Review of Conservation of Energy, Speed from Damage, Delta-V and Force Balance, and Energy Dissipation in High Speed Frontal Collisions*
- HVE Forum, Engineering Dynamics Corporation (2016)
- Annual Scientific Meeting of the American Academy of Forensic Sciences (2016)
- “Crash Data Retrieval Analyst Certification Course,” Collision Safety Institute (2015)
- Annual Conference of the California Association of Accident Reconstruction Specialists (2015)
- Fall Conference of the Southwestern Association of Technical Accident Investigators (2015)
- Human Factors & Acceleration, Compliance Testing, 3D Laser Scanners, and Consumer GPS Data*
- “Auto-Pedestrian Collision Investigation,” West Coast Accident Reconstruction Equipment & Education (2015)
- Spring Conference of the Southwestern Association of Technical Accident Investigators (2015)
- Practical Evidence Interpretation Revisited & COLM, Vectors & Kinematics, and CRASH3-Researching Stiffness Values, Motorcycle Collisions*
- Annual Scientific Meeting of the American Academy of Forensic Sciences (2015)
- “Crash Data Retrieval Technician 1 & 2 Certification Course,” Collision Safety Institute (2014)
- “Crash Data Retrieval System Operator’s and Analysis & Applications Courses,” CDR-Trainers (2014)

Annual Scientific Meeting of the American Academy of Forensic Sciences (2014)  
Fall Conference of the Southwestern Association of Technical Accident Investigators (2013)  
*Fundamentals of Video Analysis, Case Study Using Video Analysis, Momentum & Simultaneous Equations, and Tire Forensics*  
Summer Conference of The Society of Forensic Engineers and Scientists (2013)  
Spring Conference of the Southwestern Association of Technical Accident Investigators (2013)  
*GPS in Accident Reconstruction, Traffic Enforcement Cameras in Accident Reconstruction, Anomalies with Toyota EDR's Parts I&II, Force Balance in Accident Reconstruction, Traffic Surveillance in Accident Reconstruction, Post Collision Speedometer Reading and Impact Speeds, and Forensic Analysis of a Seat Belted Occupant in a Rollover Collision Ejection*  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2013)  
Spring Conference of the Southwestern Association of Technical Accident Investigators (2012)  
*Sudden Acceleration Incidents, Data Acquisition Systems, Transportation Engineering, Bicycle Collision Reconstruction*  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2012)  
CDR Summit (2012)  
Annual Conference of the California Association of Accident Reconstruction Specialists (2011)  
Spring Conference of the Southwestern Association of Technical Accident Investigators (2011)  
*Motor Vehicle Collisions & the Medical Examiner, Rollover Reconstruction Redux, Photogrammetry for Collision Reconstruction, Current Topics in Low Speed Crash Analysis*  
"PhotoModeler Training Course for Collision Reconstruction," Eos Systems, Inc. (2011)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2011)  
Stapp Car Crash Conference (2010)  
Annual Conference of the California Association of Accident Reconstruction Specialists (2010)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2010)  
Annual Conference of the California Association of Accident Reconstruction Specialists (2009)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2009)  
CDR Summit (2009)  
Annual Conference of the Association for the Advancement of Automotive Medicine (2008)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2008)  
CDR Summit (2008)  
Stapp Car Crash Conference (2007)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2007)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2006)  
CDR Summit (2006)  
"Accident Reconstruction Symposium," Society of Automotive Engineers (2005)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2005)  
CAD Design II, Engineering 131, Santa Barbara City College (2005)  
Annual Scientific Meeting of the American Academy of Forensic Sciences (2004)  
CAD Design I, Engineering 130, Santa Barbara City College (2004)  
"Crash Data Retrieval System Operator's Certification Course," Collision Safety Institute (2003)  
Stapp Car Crash Conference (2003)

Annual CIREN Symposium (2003)  
 HVE Forum, Engineering Dynamics Corporation (2002)  
 Grade Crossing Collision Investigation," Burlington Northern Santa Fe Railway Company (2002)  
 Passenger Vehicle Rollover TOPTec: Causes, Prevention & Injury Prevalence," Society of Automotive Engineers (2002)  
 "Crash Data Retrieval Training Seminar," Vetronix Corporation (2001)  
 "Accident Reconstruction TOPTec: Special Topics," Society of Automotive Engineers (2001)  
 Annual International Workshop on Human Subjects for Biomechanical Research (2000)  
 Stapp Car Crash Conference (2000)  
 "Accident Reconstruction: State-of-the-Art TOPTec," Society of Automotive Engineers (1999)  
 Stapp Car Crash Conference (1999)  
 Southern Biomedical Engineering Conference and Symposium on Aortic Valve Sparing Surgery (1999)  
 Annual International Workshop on Human Subjects for Biomechanical Research (1999)  
 SAE International Congress and Exhibition (1999)  
 Stapp Car Crash Conference (1998)  
 "Air Bag Design and Performance TOPTec," Society of Automotive Engineers (1997)  
 Stapp Car Crash Conference (1996)  
 Annual Meeting & Training Seminar, Texas Association of Accident Reconstruction Specialists (1996)  
 "Low Speed Collision TOPTec," Society of Automotive Engineers (1996)  
 "Investigation of Motorcycle Accidents," Institute of Police Technology and Training (1995)  
 Stapp Car Crash Conference (1995)  
 SOAR, TAARS, WATAI Combined Conference and Training Seminar (1995)  
 "SAE International Congress and Exhibition (1995)  
 "Injuries, Anatomy, Biomechanics and Federal Regulations," Society of Automotive Engineers (1995)  
 EDC Simulations, Engineering Dynamics Corporation (1994)  
 EDC Reconstruction, Engineering Dynamics Corporation (1994)  
 "Traffic Accident Reconstruction II," Northwestern University Traffic Institute (1994)  
 "Traffic Accident Reconstruction I," Northwestern University Traffic Institute (1994)  
 Special Problems in Motorcycle Collision Investigations, Combined Conference (1994)  
 "Forensic Physics Applied to Accident Reconstruction," Colorado School of Mines (1993)  
 Human Anatomy Laboratory, University of California at Santa Barbara (1993)  
 "BH<sub>2</sub>VK Crash Testing Project," (1992)  
 Forensic Engineering, University of California at Santa Barbara (1990)

QUARTERLY TRAINING - California Association of Accident Reconstruction Specialists

Fredericks A, *Utilizing Video Evidence in Traffic Investigations* (2019)  
 Granda, PhD, J, *The Math and Physics Behind the Equations Used in Accident Reconstruction* (2019)  
 Kent, PhD J, *Evaluating Injury Causation in Motor Vehicle Accidents: Applied Biomechanics and Clinical Science* (2018)  
 Komari, PhD O, *Introduction to Pedestrian/Bicycle vs. Auto Collisions (Biomechanical Approach)* (2018)

Vomhof III D, *Crush Measurement, Stiffness Value Research, and Force Balance Applications through "Case" Examples and Traffic Signal Timing Essentials for the Traffic Accident Investigator* (2017)

Gardiner J, Anderson S, *Accident Reconstruction & Injury Mechanics: From Black Box to Broken Bones* (2017)

Dunlap D, Eisenbeisz D, *Work Zones for Crash Investigations and Reconstructionists* (2017)

Peck L, *Photogrammetry Methods for Collision Reconstruction* (2016)

Kauderer C, *Intersection Collisions (signal phases and timing)* (2016)

Gloekler TL, *Damage Energy Methods* (2016)

Ray SP, *Tips, Tools & Techniques in Vehicle Collision Reconstruction at Failure Analysis* (2015)

Flynn J, *Vision, Perception and Attention* (2015)

Whelchel M, *Analytical Analysis of Low Speed Impact Limits by IIHS Comparisons* (2015)

Neuman L, *Reconstruction of Red Light/ Green Light Accidents* (2014)

Castañeda R, *Trailer Side Underride Collisions: Relating Collision Damage to Impact Speed* (2013)

Snook B, Reichenberg D, *A Momentum Refresher* (2013)

Allison M, *Collision Investigation Photography* (2012)

Myers B, *Expert Witness Testimony* (2012)

Allison M, Rast PH, *Crash Reconstruction Case Studies* (2011)

Stearns RE, *Forensic Analysis of Seat Belts and Occupant Kinematics Case Studies* (2009)

Gloekler TL, *Motorcycle Crash Reconstruction & Case Studies* (2009)

Boots KE, *Vehicle Factors for Crash Reconstruction* (2008)

Dutch D, *Forensic Mapping* (2005)

## PUBLICATIONS

**Weiss KD**, Pozzi MC (2020) Driver Seat and Fuel System Failure in a Rear-End Collision, *Proceedings of the American Academy of Forensic Sciences, 72<sup>nd</sup> Annual Scientific Meeting*, Anaheim, CA.

**Weiss KD** (2020) The Science Behind Traffic Accident Reconstruction with Real-World Crashes, *Proceedings of the American Academy of Forensic Sciences, 72<sup>nd</sup> Annual Scientific Meeting*, Anaheim, CA.

**Weiss KD** (2019) Shared Anchor Seat Belt Buckle Self-Release, *Proceedings of the American Academy of Forensic Sciences, 71<sup>st</sup> Annual Scientific Meeting*, Baltimore, MD.

**Weiss KD** (2019) A Fatal Injury Caused by a Scissor Jack in a Rear-Ended Collision, *Proceedings of the American Academy of Forensic Sciences, 71<sup>st</sup> Annual Scientific Meeting*, Baltimore, MD.

**Weiss KD** (2018) The Pursuit of a Stolen Police Car, *Proceedings of the American Academy of Forensic Sciences, 70<sup>th</sup> Annual Scientific Meeting*, Seattle, WA.

**Weiss KD** (2018) An Overview of Physical Evidence to Assist Driver Identification in Vehicle Collisions, *Proceedings of the American Academy of Forensic Sciences, 70<sup>th</sup> Annual Scientific Meeting*, Seattle, WA.

**Weiss KD, Hoffman MR** (2017) Vehicle Interior Surface Witness Marks Observed in the Analysis of Traffic Collisions, *Proceedings of the American Academy of Forensic Sciences*, 69<sup>th</sup> Annual Scientific Meeting, New Orleans, LA.

**Weiss KD** (2017) The Use of Strava in Bicycle Collision Analysis - A Case Study, *Proceedings of the American Academy of Forensic Sciences*, 69<sup>th</sup> Annual Scientific Meeting, New Orleans, LA.

**Weiss KD** (2016) Roadway and vehicle evidence in rollover collisions, *Plaintiff Magazine*, Vol10, No10.

**Weiss KD** (2016) Roadway and vehicle evidence in rollover collisions, *The Advocate Magazine*, Vol44, No10.

**Weiss KD** (2016) Surveillance camera video in traffic-collision reconstruction, *Plaintiff Magazine*, Vol10, No5.

**Weiss KD** (2016) Surveillance camera video in traffic-collision reconstruction, *The Advocate Magazine*, Vol44, No5.

**Weiss KD, Paver, PhD JG** (2016) Friction Tire Testing of a Run-Flat Condition Sport Utility Vehicle (SUV) Tire, *Proceedings of the American Academy of Forensic Sciences*, 68<sup>th</sup> Annual Scientific Meeting, Las Vegas, NV.

**Weiss KD** (2016) Physical Evidence Used in Rollover Crash Reconstruction, *Proceedings of the American Academy of Forensic Sciences*, 68<sup>th</sup> Annual Scientific Meeting, Las Vegas, NV.

**Weiss KD** (2015) 3D Animation Applied to the Analysis of Pre-Impact Visibility Obscurement, *Proceedings of the American Academy of Forensic Sciences*, 67<sup>th</sup> Annual Scientific Meeting, Orlando, FL.

**Weiss KD** (2014) The Forensic Analysis of an Airbag Deployment Causing Injury in a Non-Collision Event, *Proceedings of the American Academy of Forensic Sciences*, 66<sup>th</sup> Annual Scientific Meeting, Seattle, WA.

**Weiss KD** (2014) Wrong Way DUI Head-On Collision Reconstruction Using DashCam Video, *Proceedings of the American Academy of Forensic Sciences*, 66<sup>th</sup> Annual Scientific Meeting, Seattle, WA.

**Weiss KD** (2014) The Cause Analysis of a Farm Tractor and Motor Grader Collision Fatality: A Case Study, *Proceedings of the American Academy of Forensic Sciences*, 66<sup>th</sup> Annual Scientific Meeting, Seattle, WA.

**Weiss KD** (2013) Forensic Analysis of a Seat Belted Occupant Ejection in a Rollover Collision, *Proceedings of the American Academy of Forensic Sciences*, 65<sup>th</sup> Annual Scientific Meeting, Washington, DC.

**Weiss KD, Anderson RD (2012)** Frontal Crash Buckle Pretensioner Activation Causing Seat Belt Retractor Skip-Lock Failure, *Proceedings of the American Academy of Forensic Sciences, 64<sup>th</sup> Annual Scientific Meeting, Atlanta, GA.*

**Weiss KD (2011)** Failure Mode Analysis of a Resistance Exercise Product Failure Resulting in Eye Injury, *Proceedings of the American Academy of Forensic Sciences, 63<sup>rd</sup> Annual Scientific Meeting, Chicago, IL.*

**Weiss KD, Paver, PhD JG (2011)** Forensic Examination of an Unwanted Seat Belt Release in a Rollover Collision with Occupant Ejection, *Proceedings of the American Academy of Forensic Sciences, 63<sup>rd</sup> Annual Scientific Meeting, Chicago, IL.*

**Weiss KD (2010)** Reconstruction of rollover collisions, *The Advocate Magazine, Vol37, No8.*

**Weiss KD (2010)** Train Versus Train Collision Resulting in a Train Yard Fatality, *Proceedings of the American Academy of Forensic Sciences, 62<sup>nd</sup> Annual Meeting, Seattle, WA.*

**Weiss KD (2008)** The characteristics and use of tire friction marks in the determination of pre-impact velocity. *The Advocate Magazine, Vol35, No9.*

**Weiss KD, Adams HA (2008)** A Review of the Current Data Available in GM SDMs and the Positive and Negative Aspects of the Data, *Proceedings of the American Academy of Forensic Sciences, 60<sup>th</sup> Annual Scientific Meeting, Washington, DC.*

**Weiss KD (2008)** Failure mode forensic testing of seat belts; seat belts can reveal many clues after an accident, *Plaintiff Magazine, Vol2, No1.*

**Weiss KD (2007)** Auto accident reconstruction: the basics you must know; understanding what the engineer is talking about and how conclusions are reached, *Plaintiff Magazine, Vol1, No4.*

**Weiss KD (2007)** Wave-Out Airbag Fatality in a Minor Traffic Collision, *Proceedings of the American Academy of Forensic Sciences, 59<sup>th</sup> Annual Scientific Meeting, San Antonio, TX.*

**Weiss KD (2007)** Observed Damage Patterns of Narrow Object Impacts, *Proceedings of the American Academy of Forensic Sciences, 59<sup>th</sup> Annual Scientific Meeting, San Antonio, TX.*

Dickerson CP, Pozzi MC, Saczalski TK, Baray P, **Weiss KD (2007)** Characterization of Seat Belt Webbing Loop Energy Absorption Properties, *Proceedings of the American Academy of Forensic Sciences, 59<sup>th</sup> Annual Scientific Meeting, San Antonio, TX.*

**Weiss KD (2006)** Accident reconstruction software: what you need to know, *The Advocate Magazine, Vol33, No8.*



**Weiss KD** (2006) Injury Patterns and Impact Sequence of a Multiple Rear-End Collision, *Proceedings of the American Academy of Forensic Sciences*, 58<sup>th</sup> Annual Scientific Meeting, Seattle, WA.

**Weiss KD** (2005) Failure mode forensic testing of seat belts, *The Advocate Magazine*, Vol32, No9.

**Weiss KD** (2005) Forensic Testing and the Characteristics of Seat Belt Webbing Force Limiting Expansion Loops, *Proceedings of the American Academy of Forensic Sciences*, 57<sup>th</sup> Annual Scientific Meeting, New Orleans, LA.

**Weiss KD** (2005) The Need for Adequate Strength Seat Back Design - A Case Study, *Proceedings of the American Academy of Forensic Sciences*, 57<sup>th</sup> Annual Scientific Meeting, New Orleans, LA.

**Weiss KD** (2004) Basics of accident reconstruction, *The Advocate Magazine*, Vol31, No7.

**Weiss KD**, Broadhead WG (2004) Forensic Testing of Shared Anchor Seat Belt Components, *Proceedings of the American Academy of Forensic Sciences*, 56<sup>th</sup> Annual Scientific Meeting, Dallas, TX.

**Weiss KD** (2004) Evaluating the Effect of Assembly Hardware on Breaking Strength of Seat Belt Webbing, *Proceedings of the American Academy of Forensic Sciences*, 56<sup>th</sup> Annual Scientific Meeting, Dallas, TX.

**Weiss KD**, Adams HA (2004) Air Bag Control Module Response to Multiple Vehicle Impacts, *Proceedings of the American Academy of Forensic Sciences*, 56<sup>th</sup> Annual Scientific Meeting, Dallas, TX.

Sances, Jr. A, Kumaresan S, Broadhead, WG, **Weiss KD** (2003) Biomechanical Analysis of Late Airbag Deployment in Motor Vehicle Crashes, Summer Bioengineering Conference, Key Biscayne, FL.

**Weiss KD**, Broadhead WG (2003) Analysis of Shared Anchor Seat Belt Design, ASME Mechanics and Materials Conference, Scottsdale, AZ.

**Weiss KD**, Broadhead WG (2003) Examination of Seat Belt Components in Frontal NCAP Barrier Tested Vehicles, 22<sup>nd</sup> Southern Biomedical Engineering Conference and Symposium on Aortic Valve Sparring Surgery, Charlotte, NC.

Sances, Jr. A, Kumaresan S, **Weiss KD** (2002) Mechanisms of Injury in Frontal Inflatable Restraint Systems, 21<sup>st</sup> Southern Biomedical Engineering Conference, Bethesda, MD.

Broadhead WG, **Weiss KD** (1997) Driver Usage Patterns of Non-Motorized, Door-Mounted, Passive 3-Point Seat Belts, Society of Automotive Engineering, SAE Technical Paper 970119.

PRESENTATIONS

**Weiss KD, Pozzi MC (2020)** *Driver Seat and Fuel System Failure in a Rear-End Collision*, presented at the 72<sup>nd</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Anaheim, CA.

**Weiss KD (2020)** *The Science Behind Traffic Accident Reconstruction with Real-World Crashes*, presented at the 72<sup>nd</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Anaheim, CA.

**Weiss KD (2020)** *Occupant Restraint System Examination with Failure Analysis Case Studies*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME125FA Special Topics: Failure Analysis.

**Weiss KD (2019)** *Collision Reconstruction: Information Sources and Case Studies*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD (2019)** *Collision Reconstruction: Information Sources and Case Studies*, presented at Westmont College, Santa Barbara, Department of Engineering, ME 005: Engineering and the Liberal Arts

**Weiss KD (2019)** *Forensic Testing and Analysis of Seat Belts with Case Studies*, presented at the 3<sup>rd</sup> Quarter Training of the California Association of Accident Reconstruction Specialists, Glendora, CA.

**Weiss KD (2019)** *Forensic Testing and Analysis of Seat Belts with Case Studies*, presented at the 3<sup>rd</sup> Quarter Training of the California Association of Accident Reconstruction Specialists, Vallejo, CA.

**Weiss KD (2019)** *Shared Anchor Seat Belt Buckle Self-Release*, presented at the 71<sup>st</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Baltimore, MD.

**Weiss KD (2019)** *A Fatal Injury Caused by a Scissor Jack in a Rear-Ended Collision*, presented at the 71<sup>st</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Baltimore, MD.

**Weiss KD (2018)** *Collision Reconstruction with Case Studies*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD (2018)** *The Pursuit of a Stolen Police Car*, presented at the 70<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD (2018)** *An Overview of Physical Evidence to Assist Driver Identification in Vehicle Collisions*, presented at the 70<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD** (2017) *Introduction to Collision Reconstruction with Case Studies*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD**, Hoffman MR (2017) *Vehicle Interior Surface Witness Marks Observed in the Analysis of Traffic Collisions*, presented at the 69<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, New Orleans, LA.

**Weiss KD** (2017) *The Use of Strava in Bicycle Collision Analysis - A Case Study*, presented at the 69<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, New Orleans, LA.

**Weiss KD** (2016) *Collision Reconstruction Methodology and Applications*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD**, Paver PhD JG (2016) *Friction Tire Testing of a Run-Flat Condition Sport Utility Vehicle (SUV) Tire*, presented at the 68<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Las Vegas, NV.

**Weiss KD** (2015) *Physical Evidence Used in Rollover Crash Reconstruction*, presented at the 68<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Las Vegas, NV.

**Weiss KD** (2015) *Methodology and Applications of Collision Reconstruction*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2015) *3D Animation Applied to the Analysis of Pre-Impact Visibility Obscurement*, presented at the 67<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Orlando, FL.

**Weiss KD** (2014) *Collision Reconstruction with Case Studies*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2014) *The Forensic Analysis of an Airbag Deployment Causing Injury in a Non-Collision Event*, presented at the 66<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD** (2014) *Wrong Way DUI Head-On Collision Reconstruction Using DashCam Video*, presented at the 66<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD** (2014) *The Cause Analysis of a Farm Tractor and Motor Grader Collision Fatality: A Case Study*, presented at the 66<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Paver PhD JG (2014) *Electronic Crash and Injury Causation Analysis*, presented at the 66<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD**, Hunt MS (2014) *The Application and Analysis of Video in Collision Reconstruction with Case Studies*, presented at the 1<sup>st</sup> Quarter Training of the California Association of Accident Reconstruction Specialists, Santa Ana, CA.

**Weiss KD**, Hunt MS (2014) *The Application and Analysis of Video in Collision Reconstruction with Case Studies*, presented at the 1<sup>st</sup> Quarter Training of the California Association of Accident Reconstruction Specialists, San Jose, CA.

**Weiss KD** (2013) *Traffic Collision Reconstruction with Case Studies*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2013) *The Analysis of the Pre-Impact Events Leading to a Head-On Collision Involving a Wrong-Way Driver*, presented at the Fall Conference of the Southwestern Association of Technical Accident Investigators, Glendale, AZ.

**Weiss KD**, Mendoza J (2013) *Wrong-Way DUI Head-On Collision Reconstruction Using DashCam Video*, presented at the Summer Conference of the Society of Forensic Engineers & Scientists, Napa, CA.

**Weiss KD** (2013) *Forensic Analysis of a Seat Belted Occupant Ejection in a Rollover Collision*, presented at the Spring Conference of the Southwestern Association of Technical Accident Investigators, Manhattan Beach, CA.

**Weiss KD** (2013) *Forensic Analysis of a Seat Belted Occupant Ejection in a Rollover Collision*, presented at the 65<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Washington, DC.

**Weiss KD** (2012) *Collision Reconstruction and Forensic Analysis*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** Anderson RD (2012) *Frontal Crash Buckle Pretensioner Activation Causing Seat Belt Retractor Skip-Lock Failure*, presented at the 64<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Atlanta, GA.

**Weiss KD** (2011) *Motor Vehicle Seat Belts - Physical Evidence and Forensic Testing*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2011) *Forensic Testing and Analysis of Seat Belts*, presented at the 13<sup>th</sup> Annual Conference of the California Association of Accident Reconstruction Specialists, Anaheim, CA.

**Weiss KD** (2011) *Rollover Reconstruction Redux*, presented at the Spring Conference of the Southwestern Association of Technical Accident Investigators, Laughlin, NV.

**Weiss KD** (2011) *Failure Mode Analysis of a Resistance Exercise Product Failure Resulting in Eye Injury*, presented at the 63<sup>rd</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Chicago, IL.

**Weiss KD, Paver PhD JG** (2011) *Forensic Examination of an Unwanted Seat Belt Release in a Rollover Collision with Occupant Ejection*, presented at the 63<sup>rd</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Chicago, IL.

**Weiss KD** (2010) *Information and Physical Evidence Used in Collision Reconstruction*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2010) *Train Versus Train Collision Resulting in a Train Yard Fatality*, presented at the 62<sup>nd</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD** (2010) *Investigation and Analysis of Rollover Collisions*, presented at the 1<sup>st</sup> Quarter Training of the California Association of Accident Reconstruction Specialists, San Jose, CA.

**Weiss KD** (2010) *Investigation and Analysis of Rollover Collisions*, presented at the 1<sup>st</sup> Quarter Training of the California Association of Accident Reconstruction Specialists, Santa Ana, CA.

**Weiss KD** (2008) *Forensic Testing and Analysis of an Amusement Park Tram Incident*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2008) *Mormon Train Yard Fatality*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2007) *Using Vehicle Crush to Determine Collision Severity*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2007) *Wave-Out Airbag Fatality in a Minor Traffic Collision*, presented at the 59<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, San Antonio, TX.

**Weiss KD** (2007) *Observed Damage Patterns of Narrow Object Impacts*, presented at the 59<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, San Antonio, TX.

**Weiss KD** (2006) *The Role of the Expert in Supporting Case Verdict Success*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11 Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2006) *Injury Patterns and Impact Sequence of a Multiple Rear-End Collision*, presented at the 58<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Seattle, WA.

**Weiss KD** (2005) *Rear Seat Back Performance and Occupant Ejection*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11A Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2005) *Injury Patterns and Vehicle Interior Forensic Evidence in a Multiple Rear-End Collision*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11A Introductory Concepts in Mechanical Engineering.

**Weiss KD** (2005) *Forensic Testing and the Characteristics of Seat Belt Webbing Force Limiting Expansion Loops*, presented at the 57<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, New Orleans, LA

**Weiss KD** (2005) *The Need for Adequate Strength Seat Back Design - A Case Study*, presented at the 57<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, New Orleans, LA

**Weiss KD** (2005) *Performance of Vehicle Safety Devices in Real-World Collisions*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11A Introductory Concepts in Mechanical Engineering

**Weiss KD** (2004) *Vehicle-to-Vehicle, Head-On Collision Reconstruction*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11A Introductory Concepts in Mechanical Engineering.

**Weiss KD, Broadhead WG** (2004) *Forensic Testing of Shared Anchor Seat Belt Components*, presented at the 56<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Dallas, TX.

**Weiss KD** (2004) *Evaluating the Effect of Assembly Hardware on Breaking Strength of Seat Belt Webbing*, presented at the 56<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Dallas, TX.

**Weiss KD**, Adams HA (2004) *Air Bag Control Module Response to Multiple Vehicle Impacts*, presented at the 56<sup>th</sup> Annual Scientific Meeting of the American Academy of Forensic Sciences, Dallas, TX.

**Weiss KD** (2003) *Vehicle-to-Vehicle, Head-On Collision Reconstruction*, presented at the Kiwanis International meeting, Santa Barbara, CA.

**Weiss KD**, Broadhead WG (2003) *Examination of Seat Belt Components in Frontal NCAP Barrier Tested Vehicles*, presented at the 22<sup>nd</sup> Southern Biomedical Engineering Conference and Symposium on Aortic Valve Sparing Surgery, Charlotte, NC.

**Weiss KD**, Broadhead WG (2003) *Analysis of Shared Anchor Seat Belt Design*, presented at The American Society of Mechanical Engineers Mechanics and Materials Conference, Scottsdale, AZ.

**Weiss KD** (2003) *Forensic Testing and Collision Reconstruction*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11A Introductory Concepts in Mechanical Engineering.

Dr. Liu YK, Broadhead WG, **Weiss KD**, Adams HA (2002) *AIRBAGS as they relate to Accident Reconstruction, Crashworthiness, and Biomechanics of Injury Causation*, presented at the University of Northern California at Marin, Petaluma, CA.

**Weiss KD** (2002) *Forensic Testing and Collision Reconstruction*, presented at the University of California at Santa Barbara, Department of Mechanical Engineering, ME11A Introductory Concepts in Mechanical Engineering.

Dr. Liu YK, Broadhead WG, **Weiss KD**, Helleman H (1999) *AIRBAGS as they relate to Accident Reconstruction, Crashworthiness, and Biomechanics of Injury Causation*, presented at the University of Northern California at Marin, Petaluma, CA.

Dr. Liu YK, Broadhead WG, **Weiss KD** (1999) *Accident Reconstruction, Crashworthiness, and Biomechanics of Injury Causation*, presented at the University of Northern California at Marin, Petaluma, CA.

#### AWARDS

Andrew H. Payne, Jr. Special Achievement Award, Engineering Sciences Section of the American Academy of Forensic Sciences (2018)

Founder's Award, Engineering Sciences Section of the American Academy of Forensic Sciences (2016)