

## Kauderer & Associates

## Traffic Accident Reconstruction Experts

# CURRICULUM VITAE OF CHRIS KAUDERER, BSME, ACTAR

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### PROFESSIONAL CREDENTIALS

B.S. Mechanical Engineering, Santa Clara University
Full Accreditation as a Traffic Accident Reconstructionist (ACTAR #1070)
Adjunct Instructor Northwestern University Center for Public Safety
Crash Data Retrieval (CDR) Analyst Certification
Chairman, California Association of Accident Reconstruction Specialists (CA<sup>2</sup>R8) Board of Directors

## AREAS OF EXPERTISE

#### **ACCIDENT TYPES**

- Low Speed Impact
- Staged / Fraudulent
- Motorcycle
- Commercial Vehicle
- Auto / Pedestrian
- Frontal / Rear / Side Impacts
- Rollovers
- High Speed Fatalities
- Intersection
- Single Vehicle
- Auto / Bicycle
- Railroad / LRV

#### **ROADWAY**

- Forensic Mapping
- Traffic Controls
- Friction Evaluation
- Geometries / Design
- Scene Measurements
- Skid Mark Identification

#### INSTRUCTION - TEACHING

Intermediate Accident Investigation

Advanced Accident Investigation

- Traffic Accident Reconstruction- I
  Traffic Accident reconstruction II
- Auto-Pedestrian Accident Invest.
- Speed Determination from Crush
- ACTAR Test Preparation

## **ANALYSIS**

- Seed-Time-Position Studies
- Speed from Damage (Crush)

✓ Delta V (Change of Velocity)

Vehicle and Occupant Dynamics

Transfer of Forces to Occupants

- Human Factors Driver Response
- Driver Determination
- Computer-Aided Reconstruction
- Police/Expert Report Critique
- Avoidance Potential Calculations
- Tire Failure
- Technical Reports

#### **DEMONSTRATIVE EXHIBITS**

- Computer Generated Diagrams
- 2D- 3D Computer Simulations
- 3D Computer Animations
- PowerPoint Presentations
- Photographs
- Aerial Maps

#### **EMPLOYMENT**

- *Kauderer & Associates*, Sacramento, CA; Traffic Accident Reconstruction Engineer/Owner (1999-Present)
- Rudy Degger & Associates, Inc.; Roseville, CA; Traffic Accident Reconstruction Engineer (2003-2008)
- Northwestern University, Center for Public Safety; Evanston, IL; Traffic Accident Investigation and Reconstruction Technology Training Instructor (2018 – Present)
- Contra Costa County, Office of the Sheriff / Los Medanos Junior College; Traffic Accident Investigation and Reconstruction Technology Training Instructor (2002 – 2010)
- City of Sacramento Police Department / Los Rios Junior College; Traffic Accident Investigation and Reconstruction Technology Training Instructor (2003)
- D.J. Kauderer and Associates, Inc., Woodland, CA; Traffic Accident Reconstruction Engineer (1990-1998)
- D.J. Kauderer and Associates, Inc., Woodland, CA; Associate Traffic Accident Reconstruction Engineer (1985-1990)

## EDUCATIONAL BACKGROUND AND SPECIALIZED TRAINING

- B.S. Mechanical Engineering, University of Santa Clara, Santa Clara, CA
- CA<sup>2</sup>RS Forensic Examination & Analysis of Seatbelts, 8 hrs, Vallejo, CA, 2019
- EDR Summit 2019 CDR Technology & Airbag Control Module Data for Collision Reconstruction, 20 hrs, Houston, TX, 2019
- Review of Mathematical Formulae used to Traffic Accident Reconstruction, CA<sup>2</sup>RS, Sacramento, CA (2019)
- Auto vs Pedestrian/Bicycle Collision Investigation and Reconstruction, CA<sup>2</sup>RS, Roseville, CA (2018)
- Approach and Implementation of a sUAS (Drone) Program for Accident Reconstruction, CA<sup>2</sup>RS, Vallejo, CA (2018)
- Forensic Video Analysis, WA Association of Technical Accident Investigators, Burien, WA (2018)
- Technical Reconstruction of Heavy Truck Crashes, SOAR, Denver, CO (2018)
- Toyota Assiste LEmergency Braking (AEB), CA<sup>2</sup>RS, Anaheim, CA (2017)
- Southern California Fraud Investigators' Association, Palm Springs, CA (2017)
- Motorcycle Accident Investigation and Reconstruction Techniques, CA<sup>2</sup>RS, Anaheim, CA
  (2017)
- Trackic Signal Timing and Phasing Fundamentals, CA<sup>2</sup>RS, Vallejo, CA (2017)
- Speed Determination from Crush Damage, CA<sup>2</sup>RS, Vallejo, CA (2017)
- Staged Motorcycle Crash Tests, CA<sup>2</sup>RS, Vallejo, CA (2017)
- Fundamentals of Accident Reconstruction and Injury Biomechanics, CA<sup>2</sup>RS, Roseville, CA (2017)
- HVE Users Forum, EDC Corporation, New Orleans, LA (2017)
- HVE Simulations 40-hour Course, EDC Corporation, Burbank, CA (2017)
- Traffic Accident Investigation and Reconstruction in Work Zones, CA<sup>2</sup>RS, Vallejo, CA (2017)

- HVE Simulations for Collision Reconstruction, CA<sup>2</sup>RS, South Lake Tahoe, CA (2016)
- Energy and Momentum Analysis for Collision Reconstruction, CA<sup>2</sup>RS, South Lake Tahoe, CA (2016)
- Video Analysis for Accident Reconstruction, IATAI, Peoria, IL (2016)
- Injury Mechanism and Causation, CA<sup>2</sup>RS, Vacaville, CA (2016)
- Sleep Deprivation and Driving, CA<sup>2</sup>RS, Vacaville, CA (2016)

- Crash Data Retrieval Technology, CA<sup>2</sup>RS, Anaheim, CA (2016)

  Auto Pedestrian Reconstruction & Investigation, CA<sup>2</sup>RS, Anaheim, CA (2015)

  Traffic Accident Reconstruction Tips and Techniques, CA<sup>2</sup>RS, Vacaville

  Visibility and Auto-Pedestrian Collision Reconstruction

  Momentum

  Momentum
- Momentum Analysis using CDR Data, CA<sup>2</sup>RS, South Lake Tahoe, CA (2014)
- Monte Carlo Analysis in Accident Reconstruction, CA<sup>2</sup>RS, South Lake Tahoe, CA (2014)
- CDR Technician Training Level I& II, CSI, Sacramento, (2014)
- Advanced Reconstruction with CDR Applications; Varcouver, WA (2014)
- Traffic Signal Operation and Case Studies of Collisions at Signalized Intersections, CA<sup>2</sup>RS, Davis, CA (2014)
- Advanced Reconstruction with HVE, IPTM Jacksonville, FL (2014)
- Tractor Trailer Underride Collisions and Case Studies, CA<sup>2</sup>RS, Rocklin, CA (2013)
- Commercial Vehicle Collision Case Studies, CA<sup>2</sup>RS, Long Beach, CA (2013)
- Commercial Vehicle Event Data Recorders, CA<sup>2</sup>RS, Long Beach, CA (2013)
- Vehicle Rollovers, CA<sup>2</sup>RS, Long Beach, CA (2013)
- Linear Momentum in Accident Construction, CA<sup>2</sup>RS, Roseville, CA (2013)
- Motorcycle Collision Reconstruction and Investigation, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2012)
- Motorcycle Crash Texts, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2012) Motorcycle Glance Patterns, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2012)
- Motorcycle Rider Braking Behavior, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2012)
- Motorcycle Stide Data, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2012)
- Motorcycle Inspections, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2012)
- Auto Redestrian Investigation and Reconstruction, CA<sup>2</sup>RS, San Ramon, CA (2012)
- Accident Reconstruction Case Studies, CA<sup>2</sup>RS, Roseville, CA (2012)
- Human Factors in Traffic Accident Reconstruction, Crash Safety Research Group, Sacramento, CA (2012)
- Laser Scanning and Animations, CA<sup>2</sup>RS, San Ramon, CA (2012)
- Air Bag and Seat Belt Injuries, CA<sup>2</sup>RS Conference, Anaheim, CA (2011)
- Crash Data Retrieval (CDR) Update, CA<sup>2</sup>RS Conference, Anaheim, CA (2011)
- Forensic Testing and Analysis of Seat Belts, CA<sup>2</sup>RS Conference, Anaheim, CA (2011)
- Child Restraint Systems, CA<sup>2</sup>RS Conference, Anaheim, CA (2011)
- Fundamentals of Air Bags, CA<sup>2</sup>RS Conference, Anaheim, CA (2011)

- Traffic Accident Investigation and Reconstruction Case Studies, CA<sup>2</sup>RS, Roseville, CA (2011)
- Vehicle Inspection and Analysis for Repair Fraud, CA<sup>2</sup>RS, San Jose, CA (2011)
- Railroad Crossing Investigation and Reconstruction, CA<sup>2</sup>RS, Vacaville, CA (2011)
- Enhanced Driving Strategies, California Highway Patrol, Sacramento, CA (2010)
- Fundamentals of Energy Analysis, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2010)
- Adjusting Drag Factors/Spin Analysis, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2010)
- Vehicle Crush Damage Measuring Protocol, CA<sup>2</sup>RS Conference, South Lake Table (2010)
- Calculating Delta-V and Impact Speed from Crush, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2010)
- Researching and Calculating Vehicle Stiffness Values, CA<sup>2</sup>RS Conference, South Lake Tahoe, CA (2010)
- Balancing Collisions Forces, CA<sup>2</sup>RS Conference, South Lake Tahle, CA (2010)
- Tires and Tire Forces, CA<sup>2</sup>RS Conference, South Lake Tahog, CA (2010)
- Automobile Fraud Investigation, CA<sup>2</sup>RS, Sacramento, CA<sup>2</sup>(10)
- Principal Direction of Force (PDOF) Development, ARC SI Conference, Las Vegas, NV (2010)
- OnStar Fundamentals, ARC-CSI Conference, Las Vegas, NV (2010)
- Commercial Vehicle Accident Investigation and Reconstruction, ARC-CSI Conference, Las Vegas, NV (2010)
- Motorcycle Crash Analysis, ARC-CSI Conference, Las Vegas, NV (2010)
- Low Speed Accident Investigation and Reconstruction, ARC-CSI Conference, Las Vegas, NV (2010)
- Accelerometers in Accident Reconstruction, ARC-CSI Conference, Las Vegas, NV (2010)
- Fundamentals of Photogrammetry, ARC-CSI Conference, Las Vegas, NV (2010)
- Auto-Pedestrian Accident Investigation and Reconstruction, CA<sup>2</sup>RS, Roseville, CA (2010)
- Crash Data Retrieval (CDR) Analyst Certification Training, Collision Safety Institute,
   Vallejo, CA (2010)
- Energy Methods and Damage Analysis in Traffic Crash Reconstruction, IPTM, Scottsdale, AZ (2009)
- Commercial Vehicle Air Brakes, Bendix, Ocean City MD (2009)
- Commercial Vehicle Electronic Data Recorders (EDR), NAPARS, Ocean City, MD (2009)
- Detroit Diesel Engine (DDEC) Reports and Hours of Service Compliance, NAPARS Conference, Ocean City, MD (2009)
- Physics of Commercial Vehicle Collision Investigation and Reconstruction, NAPARS Conference, Ocean City, MD (2009)
- Commercial Vehicle Airbrakes, Adjustment, Stopping Ability and Calculations, NAPARS, Ocean City, MD (2009)
- Combining Aerial Photography and Forensic Mapping Data, NAPARS Conference, Ocean City, MD (2009)
- Crash Reconstruction at Traffic Signal Intersections, CA<sup>2</sup>RS Conference, Anaheim, CA (2009)

- Auto-Bicycle Collisions, CA<sup>2</sup>RS Conference, Anaheim, CA (2009)
- Auto-Pedestrian Collisions, CA<sup>2</sup>RS Conference, Anaheim, CA (2009)
- Vehicular Homicide Investigations, CA<sup>2</sup>RS Conference, Anaheim, CA (2009)
- Projectile Motion Validation Testing of the Searle Formula, CA<sup>2</sup>RS Conference, Anaheim, CA (2009)
- Controlled Motorcycle Crash Testing Co-Testing Coordinator, CA<sup>2</sup>RS, Santa Rosa, C(2009)
- Motorcycle Crash Reconstruction and Case Studies, CA<sup>2</sup>RS, Vallejo, CA (2009)
- Forensic Analysis of Seat Belts and Occupant Kinematics, CA<sup>2</sup>RS, Sacramento, CA (2009)
- Crash Data Retrieval (CDR) Technician Course, Bosch/Collision Safety Institute, Elk Grove, CA (2009)
- Motorcycle Crash Investigation, IPTM, Vallejo, CA (2009)
- Motorcycle Braking Analysis, SATAI Conference, Laughlin, NY (2009)
- Motorcycle Crush Analysis, SATAI Conference, Laughlin, NV (2009)
- Motorcycle Safety, SATAI Conference, Laughlin, NV (2009)
- Motorcycle Rider Response Testing and Evaluation, SATAL Laughlin, NV (2009)
- Accident Reconstruction Case Studies A Collaboration between Biomechanists and Reconstructionists, CA<sup>2</sup>RS, Sacramento, CA (2009)1
- Human Factors for Traffic Accident Reconstruction, Accident Dynamics Research Center, Sacramento, California (2009)
- Fundamentals of Rollover Crash Reconstruction, CA<sup>2</sup>RS Conference, Sacramento, CA (2008)
- Critical Speed and Yaw Analysis Testing, CA<sup>2</sup>RS Conference, Sacramento, CA (2008)
- Pole and Narrow Object Impacts, (A)RS Conference, Sacramento, CA (2008)
- Human Factors Evidence or Assumptions, CA<sup>2</sup>RS Conference, Sacramento, CA (2008)
- Comparing Methods of Measuring Drag Factor, CA<sup>2</sup>RS Conference, Sacramento, CA (2008)
- Court Testimony Tips, CARS Conference, Sacramento, CA (2008)
- Vehicle Factors in Crast Reconstruction, CA<sup>2</sup>RS Conference, Sacramento, CA (2008)
- Reducing Driver Distraction: Improving Safety Behind the Wheel, SAE (2008)
- Topics in Applied Physics for Traffic Accident Reconstruction, CA<sup>2</sup>RS, San Diego, CA (2008)
- Fundamentals of Roadway Lighting, University of California- Berkeley, Institute of Transportation Studies (2008)
- Human Factors for Traffic Accident Reconstruction, Accident Dynamics Research Center, Si Paul, Minnesota, (2008)
- Bicycle Accident Investigation and Reconstruction, CA<sup>2</sup>RS, Vallejo, CA (2008)
- Advanced CrashZone, Factual Diagrams.com, Sacramento CA (2008)
- Fundamentals of Traffic Signal Timing and Operations, University of California- Berkeley, Institute of Transportation Studies (2007)
- Automobile Insurance Fraud Schemes, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)
- Pedestrian Collision Reconstruction, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)
- Nighttime Visibility, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)

- Issues Related to Commercial Vehicle Reconstruction, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)
- Errors & Omissions in Reconstruction, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)
- Understanding the Importance of Low Speed Collisions, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)
- High Speed Offset Collisions, CA<sup>2</sup>RS Conference, Anaheim, CA (2007)
- Forensic Mapping, CA<sup>2</sup>RS, Vallejo, CA (2007)
- Projectile Motion. CA<sup>2</sup>RS, Long Beach, CA (2007)
- CDR Crash Data Retrieval Technician Certification Course, Collision Safety Institute/ CA<sup>2</sup>RS, Vacaville, CA (2007)
- Crash Reconstruction Start to Finish, CA<sup>2</sup>RS Conference, South Lake Table, CA (2006)
- CRASH 2006, Spine Research Institute of San Diego, Coronado, CA (2006)
- CDR Crash Data Retrieval Analyst Training, Collision Safety Institute, Vallejo, CA (2006)
- Air Bag and Restraint Systems, CA<sup>2</sup>RS, Vacaville, CA (2006)
- ABS Brake Systems & Related Physical Evidence, CA<sup>2</sup>RS, Valejo, CA (2006)
- Emergency Vehicle Operation & Human Factors, CA<sup>2</sup>RS Conference, Temecula, CA (2005)
- Emergency Vehicle EDR Downloads, CA<sup>2</sup>RS Conference, Temecula, CA (2005)
- Legal Aspects of Emergency Vehicle Operation. CARS Conference, Temecula, CA (2005)
- Emergency Vehicle Accident Case Studies, CAPS conference, Temecula, CA (2005)
- Police Officer Standards and Training (P.O.S.T.) Pursuit Driving and Code 3 Guidelines, CA<sup>2</sup>RS Conference, Temecula, CA (2005)
- Commercial Vehicle Brake Inspection, CN2RS, AC Transit Facility, Hayward, CA (2005)
- Crash Zone, Software Diagram Program, Introductory Course, KEBA, Roseville, CA (2005)
- Simulation as a Tool for Traffic Accident Analysis using PC-Crash, Advanced Seminar, MacInnis Engineering, Las Vegas NV (2005)
- Vehicle Inspection for Repair and Insurance Fraud, CA<sup>2</sup>RS, Santa Rosa, CA (2005)
- Motorcycle Design, Tire and Tiremark Interpretation, Rider Habits, CA<sup>2</sup>RS Conference, Santa Rosa, CA (2004)
- Motorcycle Brake Systems, Physical Evidence, CA<sup>2</sup>RS Conference, Santa Rosa, CA (2004)
- Controlled Motorcycle Crash Testing Co-Testing Coordinator, CA<sup>2</sup>RS Conference, Santa Rosa, CA (2004)
- Motorcycle Helmets and Injuries, CA<sup>2</sup>RS Conference, Santa Rosa, CA (2004)
- Applicable Vehicle Code Laws, Lane Sharing, Perception/Reaction Times, CA<sup>2</sup>RS Conference, Santa Rosa, CA (2004)
- Chash Data Retrieval Systems, ARC-CSI Crash Conference, Las Vegas, NV (2004)
- Crush Measuring Protocol, ARC-CSI Crash Conference, Las Vegas, NV (2004)
- Crash Testing Historical Perspective, ARC-CSI Crash Conference, Las Vegas, NV (2004)
- Evaluating and Using Crash Test Data, ARC-CSI Crash Conference, Las Vegas, NV (2004)
- Commercial Vehicle EDR Systems, ARC-CSI Crash Conference, Las Vegas, NV (2004)
- Restraint Evaluation for Collisions, ARC-CSI Crash Conference, Las Vegas, NV (2004)
- Legal Implications of CDR Data Retrieval, ARC-CSI Crash Conference, Las Vegas, NV (2004)

- Occupant Kinematics Analysis in Rollover, Side & Rear Impacts, MATAI Conference, Rock Island, IL (2004)
- Post-Crash Identification & Assessment of Occupant Contact Marks, MATAI Conference, Rock Island, IL (2004)
- Post-Crash Identification & Assessment of Restraint System Markings, MATAI Conference, Rock Island, IL (2004)
- Crash Data Retrieval (CDR) and Airbag Technology, MATAI Conference, Rock Island, (2004)
- Multi-Lane, Multi-Vehicle Crash Reconstruction, MATAI Conference, Rock Island, IL (2004)
   Tire Failure Analysis, MATAI Conference, Rock Island, IL (2004)
   Vehicle Lamp Analysis, CA<sup>2</sup>RS, Pittsburg, CA (2004)

- Razor Scooters / Bicycles; CA<sup>2</sup>RS Conference, Anaheim, CA (2003)
- Personal Mobility Devices; CA<sup>2</sup>RS Conference, Anaheim, CA (2003)
- Skateboard and Rollerblade Speeds; CA<sup>2</sup>RS Conference, Anaheim CA (2003)
- Razor Scooters / Bicycles; CA<sup>2</sup>RS Conference, Anaheim, CA (2003)
- Biomechanical Injury Causation; CA<sup>2</sup>RS Conference, Anatem, CA (2003)
- Accident Reconstruction using Excel Spreadsheets; CARS Conference, Anaheim, CA (2003)
- "Low Speed" Collisions Analysis and Biomechanics; ARC-CSI Crash Conference, Las Vegas, NV (2003)
- Collision Trauma Biomechanics; ARC-CSI Crash Conference, Las Vegas, NV (2003)
- Live Staged Collisions Observation and Analysis; ARC-CSI Crash Conference, Las Vegas, NV (2003)
- Speed from Crush Determination; Rec-CSI Crash Conference, Las Vegas, NV (2003)
- Interpreting NHSTA Crash Data, ARC-CSI Crash Conference, Las Vegas, NV (2003)
- Airborne Events Analysis and Modeling; ARC-CSI Crash Conference, Las Vegas, NV (2003)
- Commercial Vehicle Event Data Recorders (EDR); ARC-CSI Crash Conference, Las Vegas, NV (2003)
- Crash Data Retrieval System Operator's Certification Course, Collision Safety Institute, Concord, CA (2003)
- Tire Mechanics and Inspection, CA<sup>2</sup>RS, Concord, CA (2003)
- Simulation as a Tool for Traffic Accident Analysis using PC-Crash and Photo Rectification using Pe-Rect, MacInnis Engineering, Santa Ana, CA (2002)
- Occupant Kinematics and Injury Mechanisms During Motor Vehicle Collisions, University of California, Riverside Extension, Riverside, CA (2001)
- Commercial Vehicle Accident Reconstruction, CA<sup>2</sup>RS, AC Transit Training Facility, Hayward, CA (2001)
- Human Factors and Occupant Dynamics, CA<sup>2</sup>RS, Concord, CA (2001)
- Speed Determination From Crush Analysis, University of California, Riverside Extension, San Jose, CA (2000)

- Analysis of Field Crash Injury Data, Association for the Advancement of Automotive Medicine, Chicago IL (2000)
- Experimental Biomechanics and Laboratory Studies, Association for the Advancement of Automotive Medicine, Chicago IL (2000)
- Driver Characteristics and Crash Risk, Association for the Advancement of Automotive Medicine, Chicago IL (2000)
- Transit Bus Training and Testing, AC Transit Training Facility, Hayward, CA (2000)
- Acceleration (Skid) Measuring Devices and Testing, CA<sup>2</sup>RS, Stockton, CA (2000)
- Tire Forensics and Damage Analysis, Michelin Corporation, University of California Riverside Extension, Riverside, CA (2000)
- Speed from Crush, CA<sup>2</sup>RS Conference, Concord, CA (1999)
- Event Data Retrieval (EDR) Technology, CA<sup>2</sup>RS Conference, Concord, CA (1999)
- Analysis of Low Speed Collisions, Texas A&M University, College Station, TX (1999)
- Biomechanics of Low Speed Collisions, Texas A&M University College Station, TX (1999)
- Staged Traffic Accidents: Detection and Investigation, University of California, Riverside Extension, Riverside, CA (1999)
- Advanced Accident Reconstruction with the Use of Microcomputers, featuring REC-TEC,
   St. Louis County Police Training Academy, St. Louis, Mo. (1999)
- Principles of Surveying, California State University, Sagramento, Sacramento, CA (1998)
- Vehicle Damage and Energy, Texas A&M University, College Station, TX (1998)
- Momentum and Energy Principles, Texas A&M Vniversity, College Station, TX (1998)
- Heavy Air Braked Vehicle Accident Reconstruction, Texas A&M University, College Station, TX (1998)
- Measuring Protocol for Vehicle Damas, Texas A&M University, College Station, TX (1998)
- Quantifying Vehicle Crush Stiffhess Coefficients, Texas A&M University, College Station, TX (1998)
- Spreadsheets and Accident Reconstruction, Texas A&M University, College Station, TX (1998)
- Human Factors in Accident Reconstruction, University of California, Riverside Extension, Riverside, CA (1998)
- Reconstruction of Áutomobile Accidents Involving Pedestrians or Bicycles, University of California, Riverside Extension, Riverside, CA (1998)
- Transportation Facility (Highway) Design, California State University, Sacramento, Sacramento, CA (1997)
- Transportation Engineering and Planning, California State University, Sacramento, Sacramento, CA (1997)
- Traffic Accident Investigation, Traffic Institute, Northwestern University, Correspondence Course (1990)
- Investigation and Reconstruction of Commercial Vehicle Accidents, D&K Accident Reconstruction Training, Sacramento, CA (1989)
- Investigation and Reconstruction of Motorcycle Accidents, D&K Accident Reconstruction Training, Sacramento, CA (1988)
- Computer Aided Design/Drafting Technology, FMC Corporation Training Center, San Jose, Ca (1986)

- Accident Reconstruction Photography, D&K Accident Reconstruction Training, Sacramento, CA (1985)
- Traffic Accident Investigation and Reconstruction, D&K Accident Reconstruction Training, Sacramento, CA (1985)
- Speed from Skid Analysis, D&K Accident Reconstruction Training, Sacramento, CA (1985)
- Skid Mark Identification, D&K Accident Reconstruction Training, Sacramento, CA (1985)

## PEER REVIEWED PUBLICATIONS

- Comparison of Glancing Behaviors of Riders and Drivers at Unsignalized Intersections Involving Right Turns, Driving Assessment Conference, 2017
- Motorcyclists' Glance Behaviors at Unsignalized Intersections Left Turk cross Path, Transportation Research Paper (TRB paper 17-06688, 2017
- Determining When an Object Enters the Headlight Beam Pattern of a Vehicle, Society of Automotive Engineers (SAE #2013-01-0787) Published 04/08/2013
- 25 Motorcycle into Stationary Car Tests: CA2RS 2009 Data; Accident Reconstruction Journal Volume 233, No. 4, 2013
- Glancing and Stopping Behavior of Motorcyclists and Car Drivers at Intersections,
   Transportation Research Record Journal of the Transportation Research Board #2265, 2011
- Influence of Riding Experience on Glance Behavior, Brake Response Time and Deceleration Rates by Drivers and Motorcyclists, Driving Assessment Conference, 2011

## GUEST SPEAKING APPEARANCES

- Risk Management Summit, Early Reporting and Its Impact, Las Vegas, NV (2017)
- Superior Risk Management, Accident Reconstruction 101, Pleasanton, CA (2017)
- California Association of Accident Reconstruction Specialists, *Intersection Collisions*, Vacaville, CA (2016)
- California Association of Accident Reconstruction Specialists, *Intersection Collisions*, Glendora, CA (2015)
- California Association of Accident Reconstruction Specialists, Crush Measurement Protocol, Vallejo, (ACO14)
- Northern California Fraud Investigators Association Conference, *Modern Technology in Traffic Accident Investigation and Reconstruction*, Monterey, CA (2012)
- Northern California Fraud Investigators Association, New Technology and Techniques in Traffic Accident Investigation and Reconstruction, Pleasant Hill, CA (2009)
- California Association of Accident Reconstruction Specialists, *Intersection Collisions*, Vacaville, CA (2008)
- California Association of Accident Reconstruction Specialists, *Intersection Collisions*, Anaheim, CA (2008)
- State of California Bar Association, Computer Simulations in Traffic Accident Reconstruction, Anaheim, CA (2007)

#### **GUEST SPEAKING APPEARANCES CONTINUED...**

- California Association of Accident Reconstruction Specialists, Crush Measurement Protocol, Santa Rosa, CA (2006)
- California Association of Accident Reconstruction Specialists, Using Excel Spreadsheets in Traffic Accident Reconstruction, South Lake Tahoe, CA (2006)
- Spine Research Institute of San Diego, Quantifying the Severity of Low Speed Impacts, Coronado, CA (2006)
- State of California Public Defenders Association, Traffic Accident Reconstruction 1 Sacramento, CA (2005)
- California State Automobile Association, "Black Box Technology", Hayward, CA 2005)
- Allstate Insurance Company Adjusters, Documenting Traffic Accident Collision Damage, Stockton, CA (2004)

## **AFFILIATIONS**

- Accreditation Commission for Traffic Accident Reconstruction (ACTAR)
- California Association of Accident Reconstruction Specialists (CA<sup>2</sup>RS) Chairmen Board of **Directors**
- National Association of Professional Accident Reconstruction Specialists (NAPARS)
- Northern California Fraud Investigators Association (NCFIA)
- Midwest Association of Traffic Accident Investigators (MATAI)
- Illinois Association of Traffic Accident Investigators (IATAI)
- Southwest Association of Traffic Accident Investigators (SATAI)
- Society of Automotive Engineers (SAE)
- International Network of Collision Reconstructionists (INCR)
- California Trucking Association (CTA)

