## 1650 E Gonzales Rd., Box 333 Oxnard, California 93036 (805) 889-1041

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# CHRISTOPHER D. ARMSTRONG — CURRICULUM VITAE

#### **POSITION**

Founder and owner of Armstrong Forensic Reconstruction Corp. Expert consulting with years of experience in the analysis and reconstruction of automotive, heavy truck, bus, motorcycle, bicycle, and pedestrian collisions including the imaging (download) and analysis of data from passenger vehicle and commercial vehicle Event Data Recorders (EDR) and GPS telematics systems. Testimony experience in both civil and criminal matters.

#### AREAS OF EXPERTISE

- Reconstruction of collisions involving passenger cars, trucks, buses, recreational vehicles, motorcycles, bicycles, and pedestrians
- Analysis of vehicle systems and performance
- Computer reconstruction and simulation
- Photogrammetry
- Vehicle Crash Testing
- Vehicle Dynamics Testing
- Passenger car and heavy vehicle EDR data imaging and analysis and GPS telematics

## **EXPERIENCE**

- Founder and Senior Forensic Engineer of Armstrong Forensic Reconstruction Corp, Oxnard, CA; 2021 Present
- Senior Engineer with Axiom Forensic, Westlake Village, CA; 2020 2021
- Director of Engineering with Mecanica Scientific Services Corp, Oxnard, CA; 2014 2020
- Research Engineer with KEVA Engineering, LLC, Camarillo, CA; 1993 2014
- Engineer with Engineering Management Concepts (EMC), Camarillo, CA; 1992 1993

## **EDUCATION**

 California Polytechnic State University, San Luis Obispo, Bachelor of Science – Aeronautical Engineering, 1992

#### **ACCREDITATIONS**

• SAE International Accident Reconstruction Certificate Program

## PROFESSIONAL AFFILIATIONS

- SAE International
- Association for the Advancement of Automotive Medicine (AAAM)
- The Institute of Traffic Accident Investigators (ITAI)
- National Association of Professional Accident Reconstruction Specialists, Inc. (NAPARS)
- California Association of Accident Reconstruction Specialists (CAARS)

## **AUTHORED PUBLICATIONS**

- SAE J1676 Guideline for Photo-Documentation of Exterior Vehicle Damage
- SAE J3228 Digital Forensic Evidence Sources Related to Investigation and Analysis of Damage and Injury Causing Incidents
- Collision Reconstruction Methodologies, PT-186, Vol 1-12, ISBN 978-0-7680-9182-3
- Rear Override Impact Analysis of Full-size and Light Duty Pickup Trucks for Crash Reconstruction, SAE Paper 2017-01-1423
- Commercial Vehicle Global Positioning System Based Telematics Data Characteristics & Limitations, SAE Paper 2017-01-1439
- Medium Duty North American Delivery Van Frontal Barrier Crash Test Data for Crash Reconstruction, SAE Paper 2015-01-1420
- Driver's Response to Roadway Intrusion at Night, EVU 22<sup>nd</sup> Congress, Edinburgh, Scotland, October 2013
- Forensic Evidence Relating to Motorcycle Pre-Crash Maneuvers; International Motorcycle Conference, 7th, Essen, Germany, 2008
- Modeling of Truck-Car Sideswipe Collisions Using Lug Patterns, SAE Paper 2008-01-0179
- Do I Brake or Do I Swerve Motorcycle Crash Avoidance Maneuvering, MSF Intl. Safety Conf., 2006
- The Analysis and Determination of Tire-Roadway Frictional Drag, SAE Paper 2003-01-0887

#### OTHER RESEARCH ACTIVITIES

- Test Staff, Vehicle Testing, California Association of Accident Reconstruction Specialists (CAARS), Accident Reconstruction Focusing on Heavy Vehicles, Anaheim, CA, October 2002
- Test Staff, Vehicle Testing, California Association of Accident Reconstruction Specialists (CAARS), Accident Reconstruction Focusing on Heavy Vehicles, Anaheim, CA, October 2007
- Speaker, SAE TOPTEC, Accident Reconstruction: State-of-the-Art, Costa Mesa, CA, December 1999
- SAE Accident Reconstruction Technical Paper Sessions Committee, 2011 Present
- SAE Data Collection and Analysis Standards Committee, 2010 Present
- Vice-Chair Data Collection and Analysis Standards Committee, 2025 Present

### SPECIALIZED COURSES AND TRAINING

- NAPARS Sponsored Seminar, Motorcyclist Airbags: An Alternative EDR, via Zoom, July 25, 2025
- CAARS Sponsored Seminar, Forensic Mapping from Body Worn Camera Footage, via Zoom, July 24, 2024

- CAARS Sponsored Seminar , Head-to-Head Comparison: HVE versus Virtual CRASH 5, via Zoom, March 26, 2024
- CAARS Sponsored Seminar, Bicycle/E-Bike Dynamics, Irvine, CA, February 8, 2024
- SAE Course C1022, Accessing and Interpreting Heavy Vehicle Event Data Recorders (HVEDR); Fontana, CA, October 17 20, 2023
- SAE Course C1901, Advanced Applications of Heavy Vehicle EDR Data; Oxnard, CA October 18, 2022
- SAE Course PD731620, Fundamentals of Vehicle Dynamics; Virtual On-Demand, July 26, 2022
- SAE Course C1506, Reconstruction and Analysis of Motorcycle Crashes; Camarillo, CA, December 7, 2021
- SAE C1210, Applying Automotive EDR Data to Traffic Crash Reconstruction; WebEx, September 14 – 21, 2020
- SAE Course C1729, Photography for Accident Reconstruction, Product Liability, and Testing; Oxnard, CA, December 12 14, 2018
- SAE Course C1022, Accessing and Interpreting Heavy Vehicle Event Data Recorders (HVEDR); Appleton, WI, May 9 12, 2017
- EDR Summit, Houston, TX, March 6 8, 2017
- SAE Course C1417, Vehicle Crash Reconstruction Methods; Scottsdale, AZ, September 28 -30, 2016
- Engineering Dynamics Corp. (EDC) *EDCRASH* Accident Reconstruction Training Course; Burbank, CA, January 18 22, 2016
- EVU 24<sup>th</sup> Annual Congress with ITAI; Edinburgh, United Kingdom, October 15 17, 2015
- SAE Course C1022, Accessing and Interpreting Heavy Vehicle Event Data Recorders (HVEDR); Oxnard, CA, October 2013
- SAE Course C1022, Accessing and Interpreting Heavy Vehicle Event Data Recorders (HVEDR); Charlotte, NC, May 2011
- PC-Crash Essentials Workshop, Vancouver BC, August 2011
- HVE Forum, 2010, 2012, 2013, 2014
- FARO Focus 3D Scanner Certification
- SAE Accident Reconstruction Symposium, Ventura, CA, November 8 9, 2005
- Southwestern Association of Technical Accident Investigators (SATAI) Fall Conference, Tempe, AZ, November 2001
- SAE Accident Reconstruction TOPTEC: Special Topics, Tempe, AZ, May 22 24, 2001
- SAE Accident Reconstruction: State-of-the-Art TOPTEC, Costa Mesa, CA, December 9 10, 1999
- AAAM Car Crashes and Occupant Injuries: A Team Approach to Car Crash Investigation, Tempe, AZ, April 16-17, 1998