

Karl F. Shuman
Curriculum Vitae

POSITION:

Research Engineer consulting in the analysis and reconstruction of automotive collisions.

AREAS OF EXPERTISE:

- Reconstruction of accidents involving passenger cars, trucks, motorcycles, bicycles, and pedestrians
- Passenger car and Heavy Truck EDR download and analysis
- Photogrammetry and 3D measurement technology
- Vehicle dynamics and kinematics
- Computer reconstruction and simulation
- Vehicle and component testing and analysis

EXPERIENCE:

Research Engineer with the consulting firm motion+momentum forensics, 2018 to present. Responsibilities include engineering analysis and reconstruction of automobile accidents.

Research Engineer at KEVA Engineering from 2000 to 2006 and 2016 to 2018.

EDUCATION:

Bachelor of Science – Mechanical Engineering, University of California, Santa Barbara, 2001

PROFESSIONAL MEMBERSHIPS:

Society of Automotive Engineers

PUBLICATIONS:

USE OF THE FARO® FREESTYLE 3D X HANDHELD SCANNER IN CRASH RECONSTRUCTION, with D. Patel. White Paper for FARO Technologies Inc, 2017

DO I BRAKE OR DO I SWERVE- MOTORCYCLE CRASH AVOIDANCE MANEUVERING, with S. Husher, M. Varat. International Motorcycle Safety Conference, Long Beach, March 2006

RIDER INPUTS AND POWERED TWO WHEELER RESPONSE FOR PRE-CRASH MANEUVERS, with J. Kerkhoff, S. Husher, M. Varat. International Motorcycle Safety Conference, Munich, Germany, September 2004

THE ANALYSIS AND DETERMINATION OF TIRE-ROADWAY FRICTIONAL DRAG, with J. Kerkhoff, S. Husher, M. Varat, C Armstrong. SAE Paper 2003-01-0887, Society of Automotive Engineers, Warrendale PA, 2003

PROFESSIONAL ACTIVITIES:

Instructor Society of Automotive Engineers: Reconstruction and Analysis of Motorcycle Crashes, Detroit MI, April 2019.

Society of Automotive Engineers, Annual Congress, Detroit MI April 2019.

Instructor for Reconstruction and Analysis of Motorcycle Crashes for Engineers and Police, Kigali, Rwanda December 2018.

Instructor Society of Automotive Engineers: Reconstruction and Analysis of Motorcycle Crashes, El Segundo CA, October 2018.

Instructor Society of Automotive Engineers: Reconstruction and Analysis of Motorcycle Crashes, Detroit MI, April 2018.

Society of Automotive Engineers, Annual Congress, Detroit MI April 2018.

Society of Automotive Engineers, Annual Congress, Detroit MI April 2017.

Accessing and Interpreting Heavy Vehicle Event Data Recorders Class C1022, Society of Automotive Engineers, Oxnard CA October 2016.

Society of Automotive Engineers, Annual Congress, Detroit MI April 2016.

Society of Automotive Engineers, Annual Congress, Detroit MI April 2007.

International Motorcycle Safety Conference, Paper Presentation, Long Beach, CA March 2006.

Society of Automotive Engineers, Annual Congress, Detroit MI March 2006.

Society of Automotive Engineers, Annual Congress, Detroit MI March 2005.

International Motorcycle Safety Conference, Munich Germany, September 2004.

Society of Automotive Engineers, Annual Congress, Detroit MI March 2004.

Technical Presentation, Society of Automotive Engineers, Annual Congress, Detroit MI March 2003.

California Association of Accident Reconstruction Specialists, Reconstruction Focusing on Heavy Vehicles, Anaheim, CA October 2002.

Society of Automotive Engineers, Annual Congress, Detroit MI March 2002.

Society of Automotive Engineers. Toptec: Special Topics, Tempe AZ, May 2001

Society of Automotive Engineers, Annual Congress, Detroit MI March 2001.

Society of Automotive Engineers, Annual Congress, Detroit MI March 2000.