

Colin M. Wein, P.E.

Compass Consulting Engineers P.C.

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EDUCATION

Colorado School of Mines – Golden, Colorado

- B.S. Mechanical Engineering, 2013 – 2014
- B.S. Mathematical and Computer Sciences, 2001 – 2005

ACCREDITATIONS

- Licensed Professional Engineer (PE), Colorado #56822
- Licensed Professional Engineer (PE), California #M 385765
- ACTAR Accredited Traffic Accident Reconstructionist #3482
- Heavy Vehicle Event Data Recorder Download Technician and Analyst – March 2021
- Licensed Commercial Drone Remote Pilot – March 2019
- Crash Data Retrieval (CDR) Certified Data Analyst – October 2016
- Crash Data Retrieval (CDR) Certified Download Technician – July 2014
- Engineer in Training (EIT), Colorado – 2014

PROFESSIONAL EXPERIENCE

Compass Consulting Engineers P.C. – Westminster, Colorado (2017 – Present)

Principal, Senior Engineer

- Perform investigation, reconstruction and analysis of motor vehicle accidents, including automobiles, SUV rollovers, heavy vehicles, bicycles, motorcycles and pedestrian impacts
 - Perform crash scene and vehicle inspections to collect three-dimensional geometry and physical evidence using three-dimensional LiDAR scans and aerial images from drone flights
 - Create three-dimensional point clouds of damaged vehicles and crash sites using FARO Scene, Autodesk ReCap and Pix4D software
 - Utilize PhotoModeler Premium software to perform photogrammetry to reconstruct old or destroyed physical evidence and damaged vehicle geometry
 - Simulate motor vehicle accidents using physics-based HVE software and simulation models such as EDCRASH, EDSMAC, and SIMON from
 - Create precise two- and three-dimensional drawings using the computer-aided design software AutoCAD
 - Mathematical analysis of motor vehicle accidents using Microsoft Excel and Mathcad
 - Model and reconstruct rollover accidents using to match vehicle damage to roadway evidence in virtual space
 - Prepare technical reports and exhibits for litigation

Ponderosa Associates Ltd. – Lafayette, Colorado (2014 – 2017)

Project Engineer

- Performed investigation, reconstruction and analysis of motor vehicle accidents, including automobiles, SUV rollovers, heavy vehicles, bicycles and motorcycles and pedestrian impacts

- Designed testing and operated vehicles for full-scale dynamic testing related to ignition switch failure. Performed full-scale testing on vehicles to determine the effect on braking and steering after an unintended key off movement of the ignition switch

Knott Laboratory, LLC – Centennial, Colorado (2013 – 2014)

Mechanical Engineering Intern

- Performed reconstruction and analysis of motor vehicle accidents including rollovers and low speed collisions
- Worked alongside lead engineers at all phases of the reconstruction including project scope, analysis, calculations and report drafting
- Performed simulation of rollover accident using PC-Crash
- Worked alongside lead engineers on product liability cases involving product testing and report drafting

ADDDITIONAL PROFESSIONAL ACTIVITIES

- “HVE User Forum,” 3-day training, Engineering Dynamics Corporation – March 2026
- “Zero to Hero in Cloud Compare, Presented by Eugene Liscio,” 8-hour training – March 2025
- “Trailer Stability, Presented by John Daily,” 2-hour training, Joint Annual Conference hosted by NATARI – October 2024
- “Video Analysis, Presented by Josh Guthrie,” 2-hour training, Joint Annual Conference hosted by NATARI – October 2024
- “Portable and Economical Scanning for Collision Reconstruction, Presented by Eugene Liscio,” 2-hour training, Joint Annual Conference hosted by NATARI – October 2024
- “Horrible Crash Reconstruction; Learning from Other’s Mistakes, Presented by Jeffrey Muttart,” 2-hour training, Joint Annual Conference hosted by NATARI – October 2024
- “EDR Update, Presented by Rick Ruth,” 2-hour training, Joint Annual Conference hosted by NATARI – October 2024
- “RESPONSE User Forum,” 3-day training, Driver Research Institute – February 2024
- “Commercial Vehicle A.D.A.S. Evolution, Performance, Testing & Applications,” 2-hour training, NAPARS – September 2023
- “Heavy Vehicle EDR Update,” 2-hour training, NAPARS – July 2023
- “Dynamics of Heavy Trucks,” 4-day training, University of Michigan – May 2023
- “Bosch Crash Data Retrieval (CDR) Data Analyst,” 5-day training, Collision Safety Institute – October 2022
- “Interactive Driver Response Research (IDRR) Forum,” 3-day training, Crash Safey Solutions, LLC – March 2022
- “HVE User Forum,” 3-day training, Engineering Dynamics Corporation – March 2022
- “Heavy Vehicle Event Data Recorder (HVEDR) Use in Traffic Crash Investigation,” 5-day training, Forensic Training Group – March 2021
- “HVE User Forum,” 3-day training, Engineering Dynamics Corporation – March 2021
- “Human Factors for Traffic Crash Reconstruction,” 5-day training, Crash Safey Solutions, LLC – February 2021
- “HVE User Forum,” 3-day training, Engineering Dynamics Corporation – March 2019
- Volunteer Expert: Colorado Defense Lawyers Association, Trial Academy – 2014, 2016 & 2018
- Full scale vehicle testing of a Chevrolet Impala – 2018
- Full scale vehicle testing of a Chevrolet HHR – 2017
- “HVE User Forum,” 3-day training, Engineering Dynamics Corporation – March 2017
- “Bosch Crash Data Retrieval (CDR) Data Analyst,” 5-day training, Northwestern University Center for Public Safety – October 2016

- “HVE Simulations,” 5-day training, Engineering Dynamics Corporation – January 2015
- “Bosch Crash Data Retrieval (CDR) Technician Levels 1 & 2,” 2-day training, Collision Safety Institute – July 2014

PROFESSIONAL AFFILIATIONS

- National Academy of Forensic Engineers (NAFE)
- Society of Automotive Engineers (SAE)
- National Society of Professional Engineers (NSPE)
 - Colorado Central Chapter Secretary (2021 – Present)
- National Association of Professional Accident Reconstruction Specialists, Inc. (NAPARS)
- Washington Association of Technical Accident Investigators (WATAI)

GUEST SPEAKER

- South Dakota Trial Lawyers Association - 2025
- South Dakota Trial Lawyers Association – 2023
- Colorado Defense Lawyers Association - 2022
- Colorado Criminal Defense Board – 2022
- South Dakota Defense Lawyers Association – 2022

PUBLICATIONS

- S. Kumar, K. Schrum, D. Sicking, D. Holder, C. Wein, M. McCort: Biomechanics of Penetrating Trauma and Injury Mitigating Protective Measures in Guardrail Motor Vehicle Crashes. *Journal of Biomedical Science Instrumentation*, 57(2), 128-135, 2021.