

## FORENSIC ENGINEERING EXPERIENCE

**4Moto Engineers LLC** Madison, WI  
Principal Engineer/ Co-Owner (2018-present)

**Crane Engineering/ Safety Engineering Associates** Madison, WI  
Consulting Mechanical Engineer (2015-2018)

**DJS Associates, Inc.** Abington, PA  
Collision Reconstruction Engineer (2008-2015)

- Investigation and analysis of collisions and incidents involving all types of on-highway and off-highway vehicles
- Product defect and design evaluations of motorcycles, ATVs, and powersport vehicles.
- Production of written reports, demonstrative exhibits, and expert testimony
- Independent research

## VEHICLE ENGINEERING EXPERIENCE

**Donaldson Company, Inc.** Bloomington, MN  
Lead Applications Engineer (2007)

- Design and development of engine fluid filtration products for cars, trucks, and motorcycles

**Bel-Ray Company, Inc.** Farmingdale, NJ  
Product Engineer (2004-2006)

- R&D testing of lubricants and service products for motorcycles, ATVs, and powersport vehicles
- Investigation of product defect claims

## INSTRUCTIONAL EXPERIENCE

**Blackhawk Technical College** Janesville, WI  
Adjunct Physics Instructor (2019)

**University of Wisconsin Children's Hospital** Madison, WI  
AP STEM instructor (2017-2020)

**Minnesota State University** Mankato, MN  
Teaching Assistant, Mechanical Engineering (2003-2004)

## EDUCATION

Master of Science, Mechanical Engineering  
Minnesota State University, Mankato (2004)

Bachelor of Science, Mechanical Engineering  
Magna Cum Laude  
Minnesota State University, Mankato (2003)

## LICENSURE AND CERTIFICATIONS

Licensed Professional Engineer  
Wisconsin, #44326-6

Board-Certified in Forensic Engineering, Counsel of Engineering & Scientific Specialty Boards (CESB)

Technician and Analyst, BOSCH Crash Data Retrieval System (CDR)

FAA Certified UAS Remote Pilot

## PROFESSIONAL AFFILIATIONS

Society of Automotive Engineers (SAE)

National Society of Professional Engineers (NSPE)

National Academy of Forensic Engineers (NAFE)

National Association of Professional Accident Reconstruction Specialists (NAPARS)

American Motorcyclist Association (AMA), life-member

## VEHICLE HISTORY

Automotive mechanic

Racing and performance driving

Motorcycle, ATV, snowmobile, and personal watercraft operation and dealership experience

## PUBLICATION

Webb, Beloy, Lubricant Base Oil Effects on Motorcycle Engine Power, SAE Technical Paper 2008-32-0002



**Forensic Vehicle Engineers**

### **CONTINUING EDUCATION INCLUDES:**

International Forensic Photography Symposium, Ai2-3D, Toronto, Ontario, Canada

Nighttime Crash Scene Investigation, National Association of Professional Accident Reconstruction Specialists

Applying Human Factors Research- Insitute of Traffic Accident Investigators (ITAI)

Heavy Vehicle Event Data Recorders- Update Course, National Association of Professional Accident Reconstruction Specialists

EDR in Traffic Crash Reconstruction- Update Course, National Association of Professional Accident Reconstruction Specialists

Accident Reconstruction Digital Summits, Society of Automotive Engineers

Monte Carlo Analysis in Accident Reconstruction, National Association of Professional Accident Reconstruction Specialists

Photogrammetry and Analysis of Digital Media, Society of Automotive Engineers, Troy, MI

Video Evidence Analysis Symposium, Input-ACE, Spokane, WA

Methods for Determining Driver's Perception and Response, National Association of Professional Accident Reconstruction Specialists

World Conference and Crash Reconstruction Technical Sessions, Society of Automotive Engineers, Detroit, MI

Event Data Recorder Update Course, Rick Ruth, P.E., Society of Automotive Engineers

Applied Vehicle Dynamics, James Walker, P.E., Society of Automotive Engineers, Greer, SC

Engineering Ethics (multiple), NSPE

Off-Road Vehicle Dynamics, Safety Engineering Associates, Kris Kubly, PE, Madison, WI

ATV RiderCourse, ATV Safety Institute, DeForest, WI

Event Data Recorder use in Traffic Crash Reconstruction, Ruth Consulting, Abington, PA

Motorcycle Technical Steering Committee Meetings, Society of Automotive Engineers

Unique Aspects of Motorcycle Claims- National Association of Subrogation Professionals presentation, Las Vegas, NV

Accident Reconstruction and Advanced Driver Assistance Systems (ADAS), Society of Automotive Engineers

Video Analysis, Photogrammetry, and sUAS, Society of Automotive Engineers

Finite Element Analysis and Topological Optimization, Society of Automotive Engineers

Camera tracking foundation Course, PF-Track

GPS Technology in Accident Reconstruction, National Association of Subrogation Professionals presentation, Abington, PA

Drone Surveying and Aquiring Assets using ReCap and 3DS Max, Autodesk University

Vehicle Dynamics for Crash Reconstruction, National Association of Professional Accident Reconstruction Specialists

Products Liability Conference, University of Wisconsin Madison, WI

California Superbike School, Virginia International Raceway (VIR), Alton, VA

Motor Vehicle and Motorcycle Safety Inspection Training, Pennsylvania Department of Transportation, Ambler, PA

Motorcycle Safety Foundation (MSF) RiderCourses, Basic and Advanced Courses

3D Laser Scanning use in Crash Reconstruction, National Academy of Forensic Engineers presentation (NAFE)

National Crash Analysis Conference, National Crash Analysis Center, George Washington University, Washington, DC

PC-Crash Simulation Software Training Workshop, MEA Forensics, Las Vegas, NV

Bosch CDR Technician and Data Analyst Certification Training, Egg Harbor, NJ

Small Engine Technology Conference, Society of Automotive Engineers, Milwaukee, WI

National Academy of Forensic Engineers (NAFE) Conference, Las Vegas, NV

Vehicle Speed from Audio Recordings, National Association of Professional Accident Reconstruction Specialists