

Curtis Beloy PE

PRINCIPAL MECHANICAL ENGINEER



FORENSIC ENGINEERING EXPERIENCE

4Moto Engineers LLC Madison, WI

Principal Mechanical Engineer 2018-present

Crane Engineering / Safety Engineering Associates Madison, WI

Mechanical Engineer 2015-2018

DJS Associates, Inc. Abington, PA

Crash Reconstruction Engineer 2008-2015

- Investigation and analysis of accident events involving all types of on-highway and off-highway vehicles, including cars, trucks, motorcycles, bicycles, ATVs, and micromobility devices.
- Surveying and documentation of accident sites using laser scanners and aerial survey equipment (drones)
- Mechanical inspections of vehicles and equipment
- Recovery and analysis of electronic crash data
- Photogrammetry and video evidence analysis
- Computer simulations of vehicle dynamics
- Full-scale vehicle testing and data collection
- Product failure evaluation and design analysis
- Production of written reports, engineering animations, and expert testimony

OTHER 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

- Testing and development of products for motorcycles and ATVs
- Investigation of product defect claims

EDUCATION

Master of Science-Mechanical Engineering
Minnesota State University, 2004

Bachelor of Science-Mechanical Engineering
Minnesota State University, 2003

LICENSURE AND CERTIFICATIONS

Licensed Professional Engineer
Wisconsin, #44326-6
Minnesota, #57019

Technician and Analyst Certifications,
Crash Data Retrieval (CDR)

FAA Certified UAS Remote Pilot

PROFESSIONAL AFFILIATIONS

Society of Automotive Engineers (SAE)

National Society of Professional Engineers (NSPE)

American Society of Mechanical Engineers (ASME)

National Association of Professional Accident
Reconstruction Specialists (NAPARS)

American Motorcyclist Association (AMA)

VEHICLE HISTORY

Experienced automotive mechanic

Powersports equipment operation since youth

Expert-level Motorcycle Racer

Powersports dealership experience

PUBLICATION

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



Forensic Vehicle Engineers

INSTRUCTIONAL EXPERIENCE

Blackhawk Technical College Janesville, WI
Adjunct Physics Instructor, Spring Semester 2019

University of Wisconsin Children's Hospital Madison, WI
STEM Instructor 2017-present

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

PRESENTATIONS

Crash Reconstruction, State Auto Insurance Companies, webinar

Accident Reconstruction: Motor Vehicles and Motorcycles,
Property & Liability Resource Board Regional Conference
Des Moines, IA

Vehicle Accident Reconstruction, Site and Incident
Management Seminar Appleton, WI

Documenting and Using Data with 3D High-Definition Survey
and Hand-Held Scanners, NJAJ, Atlantic City, NJ

3D Laser Scanning and Reconstruction Analysis, NJAJ, Atlantic
City, NJ

Motorcycle Accident Reconstruction,
8th Annual Auto ExecuSummit Uncasville, CT

Accident Investigation and New Technology, Delaware Valley
International Association of Special Investigation Units
Willow Grove, PA

Accident Investigation & Reconstruction,
PA Auto Crime Investigators Philadelphia, PA

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

EDRs, GPS, and Accident Reconstruction,
State Farm Insurance Concordville, PA

Laser Scanning and Illustrating Collisions within a Three-
Dimensional Environment, National Academy of Forensic
Engineers Las Vegas, NV

CONTINUING EDUCATION

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

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

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

Event Data Recorder Update Course, Society of
Automotive Engineers

Applied Vehicle Dynamics, Society of Automotive
Engineers, Greer, SC

Off-Road Vehicle Dynamics, Kris Kubly, PE, Madison, WI

ATV RiderCourse, ATV Safety Institute, DeForest, WI

Products Liability Conference, University of Wisconsin
Madison, WI

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

Motorcycle Safety Foundation Courses

GPS Technology in Accident Reconstruction, NASP
Abington, PA

California Superbike School, Virginia International
Raceway, Alton, VA

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

Motor Vehicle and Motorcycle Safety Inspection
Training, PennDOT, Ambler, PA

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

PC-Crash Software Training, MEA For., Las Vegas, NV

Bosch CDR Technician and Data Analyst Certification
Egg Harbor, NJ

World Congress and Technical Sessions, Society of
Automotive Engineers, Detroit, MI

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