



CURRICULUM VITAE
BRENNAN P. KIRBY

EDUCATION

2023 BS COLORADO SCHOOL OF MINES – GOLDEN, COLORADO
College of Engineering
Engineering Physics

PROFESSIONAL EXPERIENCE

2023 – DATE VECTOR SCIENTIFIC, INC.
Engineer / Research and Testing
Accident Reconstruction
Motor vehicle accident investigation, analysis, and reconstruction of low-speed and high-speed frontal, rear-end, lateral, sideswipe, and rollover collisions; accident scene and vehicle inspections and evidence documentation including Event Data Recorder (EDR) Crash Data Retrieval (CDR) downloads and 3D laser scanning; engineering analyses and computer simulation of vehicle and collision dynamics.

2020 – 2023 NUFLUSH
Head of Design

LICENSES AND CERTIFICATES

2024 / Apr Accreditation Commission for Traffic Accident Reconstruction (ACTAR)
Fully Accredited Traffic Accident Reconstructionist #4981

2023 / Oct Bosch/Vetronix Crash Data Retrieval (CDR)
CDR Data Analyst and System Operator Certification

2023 / Sept Bosch/Vetronix Crash Data Retrieval (CDR)
CDR Technician I & II Certifications

RESEARCH AND TESTING

- 2023 – 2024 VECTOR SCIENTIFIC, INC.
Wheel Separation Vehicle and Occupant Kinematics
- 2022 – 2023 COLORADO SCHOOL OF MINES
Estimated Trajectories of Relativistic Tau Leptons and their Decay Products Produced by High-Energy Cosmic Rays for the EUSO-SPB2 Mission
Collaboration of CSM Professors, CSM engineering physics students, and NASA to develop code to estimate path of muons and their decay products.

CONFERENCES, SEMINARS AND COURSES

- 2025 / Apr National Association of Professional Accident Reconstructionists (NAPARS)
Beyond the Last Precrash Speed Value
- 2025 / Oct National Association of Professional Accident Reconstructionists (NAPARS)
Non-CDR Data Sources
- 2025 / Jul National Association of Professional Accident Reconstructionists (NAPARS)
Motorcyclist Airbags: An Alternative EDR Inflating the Survivability Margin of Rider Crashes
- 2025 / Apr National Association of Professional Accident Reconstructionists (NAPARS)
The Successes, Limitations, and Future of Automatic Emergency Braking
- 2024 / Apr Society of Automotive Engineers (SAE)
WCX 2025 – SAE World Congress
- 2025 / Mar National Association of Professional Accident Reconstructionists (NAPARS)
Finding A/B stiffness values from NHTSA data
- 2024 / Jun National Association of Professional Accident Reconstructionists (NAPARS)
Toyota Safety Sense – History and Tech
- 2024 / Mar CA2RS eSeminar
Intelligence Tradecraft: Principles for Transportation Investigations
- 2024 / Mar Northwestern University Center for Public Safety
Traffic Crash Reconstruction I
- 2023 / Dec Institute of Police Technology and Management
Advanced Traffic Crash Investigation
- 2023 / Oct Northwestern University Center for Public Safety
Traffic Crash Investigation I
- 2023 / Oct Bosch Crash Data Retrieval
CDR System Analyst Course

2023 / Sept Virtual Crash Live Classroom Training Workshop
 Virtual Crash 5 Accident Reconstruction Software

2023 / Sept Bosch Crash Data Retrieval
 CDR Technician Course

PROFESSIONAL MEMBERSHIPS

National Association of Professional Accident Reconstruction Specialists (NAPARS)

Society of Accident Reconstructionists (SOAR)

Society of Automotive Engineers (SAE)

