JACOB PALMER

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TRAFFIC ACCIDENT RECONSTRUCTION

EDUCATION

COLORADO SCHOOL OF MINES

BS Mechanical Engineering **2020**
Minor: Computer Science

LICENSES & CERTIFICATIONS

Traffic Accident Reconstructionist, Accreditation Commission for Traffic Accident Reconstruction (ACTAR)

Accident Reconstruction Certificate Program — Society of Automotive Engineers (SAE)

Remote Pilot, Small Unmanned Aircraft Systems — Federal Aviation Administration (FAA)

M1 Motorcycle Endorsement **CO**

Crash Data Retrieval (CDR) System - Technician

Technical Design in SolidWorks - Associate

Pix4Dmapper Essentials Certificate

AFFILIATIONS

Society of Automotive Engineers (SAE)

National Association of Professional Accident Reconstruction Specialists

PROFESSIONAL PROFILE

Mr. Jacob Palmer is an Accident Reconstructionist at Explico. He investigates and reconstructs vehicular collisions involving passenger vehicles, commercial vehicles, motorcycles, bicycles, buses, and pedestrians. He analyzes and documents evidence, performs calculations using principles of physics, and uses computer simulation programs such as PC-Crash and Virtual Crash to analyze vehicle motion.

Mr. Palmer conducts vehicle and scene inspections with cameras, terrestrial laser scanners, drones, and other surveying equipment to document evidence. He is a Bosch Crash Data Retrieval (CDR) Technician and a Certified Remote Pilot in Command. He regularly retrieves and analyzes collision data from airbag and powertrain control modules and has experience in collecting and preserving crash data from heavy vehicle event data recorders, engine control modules, anti-lock brake sensor modules, and other components.

Mr. Palmer has conducted and analyzed instrumented motorcycle testing using a VBOX Data Acquisition System and GoPro cameras. He also participated in research involved EEPROM chip-swap techniques for retrieving collision data from damaged airbag control modules. Prior to joining the accident reconstruction industry, Mr. Palmer held an internship with PING Golf where was a member of the Analysis and Testing department.

Areas of Expertise

Evidence Documentation Using UAVs, Laser Scanners, and Photogrammetry
Simulation of Vehicle Accident Dynamics
Motorcycle Accident Reconstruction
Data Analysis for Research and Testing

Experience

Explico

2024 - Present *Senior Accident Reconstructionist*
2022 - 2023 *Accident Reconstructionist*

Luminous Forensics

2020 - 2021 *Accident Reconstructionist*

PING Golf

2019 *Analysis and Test Intern*

CalPortland Company

2018 *Operations Intern*

Publications

Palmer, J., Rose, N.A., Smith, C., et al., "Validation of the PC-Crash Single-Track Vehicle Driver Model for Simulating Motorcycle and Bicycle Motion," SAE Technical Paper 2024-01-2475, 2024.

Rose, N., Palmer, J., Smith, C., Carter, N., et al., "Decelerations of Capsized Motorcycles - An Update," SAE Technical Paper 2022-01-0823, 2022. Doi:10.4271/2022-01-0823

Jason P. Zeitler, Jacob Palmer, and Connor Smith, "Validation of EEPROM Chip Removal and Reinstallation for Retrieval of Electronic Crash Data — Destructive and Non-Destructive Methods," SAE Technical Paper #2021-01-0907

Technical Presentations

"Validation of the PC-Crash Single-Track Driver Model," Accident Reconstruction Digital Summit, Society of Automotive Engineers, February 6 2024.

"Decelerations of Capsized Motorcycles - An Update," SAE Technical Paper Presentation, 2022 Society of Automotive Engineers World Congress, Detroit, Michigan, April 5, 2022.

Professional Development

"ADAS Testing and Reconstruction," 3-day course, Society of Automotive Engineers, Course #C2413, Mohnton, PA, November 4-6, 2025.

"PC-Crash Las Vegas Workshop," PC-Crash, 3-day course, May 19-21,2025.

"PC-Crash Best Practices," PC-Crash, 3-hour webinar, January 22, 2025.

"Photogrammetry and Analysis of Digital Media," 3-day course, Society of Automotive Engineers, Course #C1712, Denver, CO, August 28-30, 2024.

"Bendix Comprehensive Air Brake Training Program," Bendix Commercial Vehicle Systems, Course #ABT101, May 16, 2024.

"Motorcycle Collision Reconstruction," 4-day course, completed September 8, 2023, Instructor: Louis Peck.

"Pix4Dmapper In-Depth Online Course," Pix4D, 12-hour course, Completed on March 24, 2023.

"Pix4Dmapper Essentials Online Course," Pix4D, 12-hour course, Completed on March 13, 2023.

"PC-Crash Super Scenes," PC-Crash, 3-hour webinar, November 29, 2022.

"Applied Vehicle Dynamics," 3-day course, Society of Automotive Engineers, Course #C0414, Greer, SC, October 24-26, 2022.

"Virtual CRASH Live Classroom Training Course," Virtual Crash, 3-day course, Gainesville, FL, August 16-18, 2022.

"Part 107 Small UAS Recurrent," FAA Aviation Safety Course #ALC-677, June 30, 2022.

"Reconstruction and Analysis of Motorcycle Crashes," Society of Automotive Engineers, 1-day course, Course #1506, December 7, 2021.

"Vehicle Crash Reconstruction: Principles and Technology," Society of Automotive Engineers, 3-day course, Course #C1728, June 15-17, 2021.

"Advanced Applications of Heavy Vehicle EDR Data," Society of Automotive Engineers, 2-day course, Course #C1901, May 24-25, 2021.

"Accessing and Interpreting Heavy Vehicle Event Data Recorders," Society of Automotive Engineers, 3.5-day course, Course #C1022, May 18-21, 2021.

"California Motorcyclist Safety Program's Motorcycle Training Course," Clutch Motorcycle Training, 16-hour course, Long Beach, CA, May 3-5, 2021.

"Apply Automotive EDR Data to Traffic Crash Reconstruction," Society of Automotive Engineers, 24-hour course, Course #C1210, September 14-18 and September 21, 2020.

"Crash Data Retrieval (CDR) Technician Course," Collision Safety Institute, 16-hour course, Westminster, CO, June 2-3, 2020.