JACOB PALMER

720.990.7712
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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

Society of Automotive Engineers

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

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

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

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

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

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

Clutch Motorcycle Training

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

Collision Safety Institute

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

Federal Aviation Administration

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

Miscellaneous

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

Pix4D

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

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

PC-Crash

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

Virtual Crash

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