Curriculum Vitae

Mitchell A. Chermak, E.I., B.S.M.E.
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BACKGROUND

Mr. Chermak is a Mechanical Engineer specializing in accident reconstruction and forensic engineering research and analysis. He has worked on hundreds of accident reconstruction cases, which have included automobiles, trucks, tractor-trailers, motorcycles, pedestrians, bicycles and various machinery and products. He has provided technical analysis on patent infringement cases, research and analysis regarding ANSI and ASTM standards, and 3D simulation and animation of vehicular accidents. Detailed inspections of vehicles and scenes have included the acquisition and analysis of Airbag Control Module (ACM) data, Tractor Trailer Electronic Control Modules (ECM) data, 3D laser scans, and unmanned aerial vehicle imagery. He also provides analysis on topics such as roadside safety, maintenance of traffic, and mechanical systems and product failures. Mr. Chermak is a graduate of San Jose State University.

AREAS OF EXPERTISE

- Automobile and Tractor-Trailer Collisions
- Bicycle, Motorcycle, and Pedestrian Accidents
- Guardrails, Roadside Safety, and Construction Zones
- Maintenance of Traffic (MOT) Evaluation
- Black Box and ECM Downloads and Analysis
- Product and Machinery Failure Analysis
- Restraint System Analysis
- Patent Litigation Technical Analysis
- Golf Cart, RV, and ATV Accidents
- Digital Video Analysis

PROFESSIONAL LICENSES & CERTIFICATIONS

- State of California, E.I.T. #155014
- FAA Remote Pilot Certification, #4336481
- Certified Counter Balanced Forklift Operator

EDUCATION

- B.S., Mechanical Engineering, Minors: Mathematics and Physics, San Jose State University, San Jose, CA, 2017

PROFESSIONAL EXPERIENCE

2019 – Present | Quality Forensic Engineering, LLC | Mechanical Engineer, Tallahassee, FL

2016 – Present | Angle Systems, LLC | Application Engineer (Part-Time Remote Position), San Jose, CA

2018 – 2019 | BEC Consulting, LLC | Mechanical Engineer, Tallahassee, FL

2016 – 2017 | San Jose State University | Supplemental Instructor for ME101, Dynamics, San Jose, CA

| Tutor for Engineering, Mathematics and Physics, San Jose, CA

NOTABLE PROJECTS

Forensic Engineering
Mr. Chermak has managed many forensic engineering projects, including the following specific subjects and issues:

- Vehicular accident reconstruction
- Tractor-trailer accident reconstruction
- Bicycle accident reconstruction
- Motorcycle accident reconstruction
- Pedestrian accident reconstruction
- Roadside safety device application and evaluation
- Construction zone accidents
- Vehicle electronic data acquisition and analysis
- Accident video analysis
- Product design and product failure analysis and testing
- Maintenance of traffic (MOT) related accidents
- Restraint system and evidence analysis
- Vehicle dynamics
- Mechanical design and failure evaluation
- Traffic signal sequence evaluation
- Unmanned aerial vehicle imaging and analysis
- 3D scan data collection and analysis
- Patent infringement and validity

Metrology
While serving as an Application Engineer for Angle Systems, Mr. Chermak works on continued software development for various offline measurement and inline defect inspection systems. These systems utilize machine vision and laser triangulation sensors to provide accurate and repeatable measurements through a highly automated procedure. The inline defect inspection systems also utilize machine learning for rapid and reliable classification for real-time defect detection. These systems have seen wide adoption in wire, cable, and medical tubing extrusion lines by many well-known manufacturers both in the United States and abroad.

PROFESSIONAL ASSOCIATIONS

- American Society of Mechanical Engineers (ASME)
- National Association of Professional Accident Reconstruction Specialists (NAPARS)
- National Safety Council (NSC)

COURSEWORK/CONTINUING EDUCATION

December 2025 | “Tractor-Trailer Collision Reconstruction/Technology,” Brian A. Darr, P.E., B.S.M.E., IAAI-FIT(V), NAFI-CFEI, Quality Forensic Engineering, LLC

December 2025 | “Engineering Roundtable Seminar,” Quality Forensic Engineering, LLC

December 2025 | “Advanced Analysis of EDR,” Jodie E. Immell, B.S.M.E., ACTAR, Quality Forensic Engineering, LLC

December 2025 | “Video and EDR in PC-Crash,” MEA Forensic, Webinar

November 2025 | Recertification Training and Testing for FAA Part 107 Remote Aircraft Pilot Licensing

September 2025 | “Slips and Falls: Walk This Way,” Ian M. Zeller, Ph.D., P.E., ACTAR, Quality Forensic Engineering, LLC

July 2025 | “The Case for Crash-Tested Hardware Webinar,” by International Road Federation (IRF Global)

July 2025 | “Tractor-Trailer Collision Reconstruction Technology,” Sean P. Vozza, E.I., BSME, Quality Forensic Engineering, LLC

May 2025 | “Pedestrian and Bicycle Accident Reconstruction,” Michael Hill, Ph.D., P.E., Quality Forensic Engineering, LLC

May 2025 | "Accident Reconstruction and Digital Data," Erich L. Breedlove, Quality Forensic Engineering, LLC

April 2025 | "Forensic Evaluation of Slip, Trip, and Fall Events," Traci K. Campbell, P.E., CFSE, CXLT, Quality Forensic Engineering, LLC

January 2025 | “PC-Crash Best Practices,” MEA Forensic, Webinar

October 2024 | “Engineering Roundtable Seminar,” Quality Forensic Engineering, LLC

October 2024 | “Product Liability,” by Brian G. Pfeifer, Ph.D., P.E., Quality Forensic Engineering, LLC

September 2024 | “The Fascinating World of Biomechanical Engineering,” Michael Hill, Ph.D., P.E., Quality Forensic Engineering, LLC

June 2024 | 2nd International Conference and Peer Exchange on Roadside Safety, Transportation Research Board, Orlando, FL

June 2024 | "Tire Basics & Tire Failure Evaluation," by Brian A. Darr, P.E., Quality Forensic Engineering, LLC, New Orleans, LA

June 2024 | "Maintenance of Traffic and Work Zones," by Tyler P. White, E.I. Quality Forensic Engineering, LLC, Tampa, FL

May 2024 | "Motor Vehicle Accident Biomechanics and the Daubert Standard," by Ian Zeller, Ph.D., Quality Forensic Engineering, LLC

February 2024 | Vehicle Response software training, 2024 User Forum, Driver Research Institute, Long Beach, CA

February 2024 | "PC-Crash Workshop: GPS data, EDR, Animations, Video Analysis, Multibody Physics, …and more," MEA Forensic, Irvine, CA

June 2023 | "Accessing and Interpreting Heavy Vehicle Event Data Recorders" by Timothy Austin, et al., Society of Automotive Engineering (SAE) C1022, Appleton, WI

April 2023 | "A Historical Perspective on Technology in Recon – Then and Now" by Wade Bartlett, World Reconstruction Exposition, Orlando, FL

April 2023 | "Commercial Vehicle Collision Mitigation Systems – More than just Radar Love" by Tim Cheek, Wesley Grimes, and David Plant, World Reconstruction Exposition, Orlando, FL

April 2023 | "Nighttime Recognition and Visibility" by Swaroop Dinakar, World Reconstruction Exposition, Orlando, FL

April 2023 | "High Speed Testing of FCW and AEB Systems" by Shawn Harrington, World Reconstruction Exposition, Orlando, FL

April 2023 | "Underride Reconstruction, Reporting, & Regulations" by Aaron Kiefer, World Reconstruction Exposition, Orlando, FL

April 2023 | "The Use of Mobile Device Lidar in Collision Reconstruction" by Eugene Liscio, World Reconstruction Exposition, Orlando, FL

April 2023 | "Accessing Toyota Event/Camera Data Through Tech Stream Software" by Nick Manz and Brad Muir World Reconstruction Exposition, Orlando, FL

April 2023 | "Reconstruction of Autonomous Vehicle and ADAS Tech Collisions" by Alan Moore, World Reconstruction Exposition, Orlando, FL

April 2023 | "The Future of Recon: Data Driven" by Louis Peck, World Reconstruction Exposition, Orlando, FL

April 2023 | "Methods for Establishing Motorcycle Impact Speed" by Louis Peck, World Reconstruction Exposition, Orlando, FL

April 2023 | "Guardrail End Terminal Crash Reconstruction" by Lawrence Wilson, World Reconstruction Exposition, Orlando, FL

April 2023 | "ATV Collision Investigations" by Mark Wright, World Reconstruction Exposition, Orlando, FL

April 2023 | Crash Testing, World Reconstruction Exposition, Orlando, FL

November 2022 | "PC-Crash Webinar Online Training Super Scene," PC-Crash, Online Webinar

June 2022 | "Mock Trial" by Brian G. Pfeifer, Ph.D., P.E., Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Technology & Accident Reconstruction" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Tractor-Trailer Collision Reconstruction" by Brian G. Pfeifer, Ph.D., P.E., Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Pedestrian & Bicycle Accident Reconstruction" by Brian G. Pfeifer, Ph.D., P.E., Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Accident Reconstruction 101" by Brian G. Pfeifer, Ph.D., P.E., Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Slips, Trips & Falls: Awareness and Avoidance" by Traci K. Campbell, Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Fieldwork Safety Procedures" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

May 2022 | "Cyber Security Training" by Brian Rode, Premiere Computer Solutions, Tallahassee, FL

December 2021 | "Download and Analysis Techniques for Hyundai and Kia Vehicles" and "Engine Control Modules" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

October 2021 | Recertification Training and Testing for FAA Part 107 Remote Aircraft Pilot Licensing

July & October 2021 | "Photogrammetry Techniques and Procedures" by Patrick D. Weber, Quality Forensic Engineering, LLC, Tallahassee, FL

July 2021 | "Fieldwork Safety Procedures" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

June 2021 | "Cyber Security Training" by Brian Rode, Premiere Computer Solutions, Tallahassee, FL

June 2021 | "Using Video Evidence in Simulations," PC-Crash, Online Webinar

April 2021 | "Operator Safety Training – Sit-down Counter Balance Forklifts," Ring Power Lift Trucks, Tallahassee, FL

February 2021| "PC-Crash Simulation Software Self-Paced Video Tutorial Training," PC-Crash, Online Webinar

August 2020 | "Traffic Crash Reconstruction I" Northwestern University Center for Public Safety, Evanston, IL

July 2020 | "Tractor-Trailer Inspection 101" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

July 2020 | "Berla iVe Overview" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

February 2020 | "Fundamentals of CDR Downloads" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

February 2020 | "ACM Repowering Rig and the CDR900" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

February 2020 | "Fieldwork Safety Procedures" by Christian A. Yates, Quality Forensic Engineering, LLC, Tallahassee, FL

September 2019 | Training Course for Preparation to the FAA Part 107 Exam for Certification as a Remote Aircraft Pilot

Spring 2017 | "Numerical Analysis and Scientific Computing," San Jose State University, San Jose, CA

Spring 2017 | "Mathematical Modeling," San Jose State University, San Jose, CA

Fall 2016 - Spring 2017 | "Advanced Mechanics I & II," San Jose State University, San Jose, CA

Spring 2016 | "Applied Probability and Statistics," San Jose State University, San Jose, CA

PRESENTATIONS

"Qforensics Introductory Training: PC Crash Training and Demonstration," Quality Forensic Engineering, LLC, December 2024.

"Qforensics Introductory Training: Accident Reconstruction Calculations and Standard and Reference Research/Review Techniques," Quality Forensic Engineering, LLC, November 2024

March 23, 2026