



7355 Remcon Circle  
Suite 103  
El Paso, TX 79912  
(915)-533-4041  
Fax: (915)533-6653

## **RESUME'**

**Paul E. Morales, M.S.I.E.**

### **EDUCATION**

Masters of Science, Industrial Engineering, New Mexico State University, May 2020.

Bachelor of Science, Construction Engineering, University of Southern Mississippi, December 2016. Curriculum: Calculus I, II & III, Economics for Engineers & Scientists, Philosophy, Graphics Fundamental in Engineering Design, Mechanics, Statics, Electro Mechanical Systems, Mechanics of Materials

Associates of Science, Architecture, El Paso Community College, December 2009. Curriculum: Architectural History I & II, Intro to Architecture, Computers in Architecture, Precal I, Research Writing & Literature Analysis, Architectural Design I & II, Architectural Freehand Drawing I & II, Architectural Technology I & II, Architectural, Aesthetics, General Physics, General Chemistry, Psychology, Master Academic, Excellence.

### **EXPERIENCE**

**TNM Engineering, LLC**, Accident Reconstruction Assistant, 08/10 – Present. Provide investigation, analysis, and reconstruction services for traffic accidents, equipment and component failures.

**Parkhill Smith & Cooper**, El-2 Trainee, 06/08-8/10. Assist create architectural construction documents, prepare working drawing showing plans, elevations, sections, materials, and finishes, as well as other aspects such as layouts, plumbing, drainage, car parking, and landscaping, communicated and coordinated with disciplines involved, and ran errands as a needed basis.

**SPECIALIZED TRAINING / CONTINUING EDUCATION**

“Collision Reconstruction”, Delta Collision Consulting & Training, September 2012, 80 hours, Curriculum include higher level of mathematics, trigonometry, and physics, investigate airborne events and applications of Conservation of Momentum, Newton’s First Law of Motion, diagramming, energy based equation, linear momentum, time and distance analysis, 360 degree method of momentum, principle direction of force, delta v, and vector sum diagram.

"Traffic Crash Reconstruction I", Northwestern University Center for Public Safety, May 2018, 80 hours. Curriculum included vehicle dynamics and Newton's laws, basic statics, heavy truck accident reconstruction, conservation of momentum, energy, crush analysis and speed estimates from damage, marks on the road, driver strategy and tactics, derivation of equations, case presentation, testimony, report writing, exhibits. Case studies included cars, trucks, trains, and pedestrians.

Aras 360 Advanced 3D Computer Diagramming for Crash Reconstruction, Aras 360 Technologies Inc., May 2011,

CDR Technician Certified. How to use the Bosch CDR Tool online Course by Crash Academy, May 4, 2018. 4 hours, Included Instruction and History of CDR and EDR, hardware components, software install and active, software operation basics, help file and vehicle and cable lookup, regulations and privacy, DLC and D2M download, and troubleshooting.

“Faro Laser Scanner training program” El Paso, Texas, February, 2013. Included training for Faro Laser Scanner in the use of Accident Reconstruction and Data collection, use of Scene software to evaluate accident scene and vehicles, measurements and point cloud data acquisition.

“Intro to iNPUT-ACE and Case Management courses” January, 2021.

“iNPUT-ACE Workflows and Technical Considerations and Narrative Reports and Demonstratives courses” February, 2021.

“Remote Pilot”, Department of Transportation- Federal Aviation Administration, September, 2018.

“CDR Analysis and Application Course”, Crash Data Specialists, July 2022, 40 hours.

“Pedestrian Collision Investigation Course”, Accident Analysis & Reconstruction Inc., El Paso, TX. March 2023. Included training on pedestrian injuries, roadway evidence, vehicle evidence, pedestrian/ vehicle collision dynamics, trajectory types, pedestrian conspicuity, bicycle crash investigation, bus off-tracking calculations, pedestrian crash test, detailed crash test review.

“Tire Examinations” online Course by Institute of Police Technology and Management, August 2023.

“Vehicle Lamp Examinations” online Course by Institute of Police Technology and Management, August 2023.

“Safety Belt Examinations” online Course by Institute of Police Technology and Management, August 2023.

“Commercial Vehicle Crash Investigation-Level 1” online Course by Institute of Police Technology and Management, September 2023, Course included detailed information of the nomenclature and operation of commercial motor vehicles and provide understanding of mechanical components, parts and pieces of the commercial motor vehicle and how they may factor into an investigation.

“Accessing and Interpreting Heavy Vehicle Event Data Recorders”, SAE International, June 2024. Curriculum included how to identify the potential sources of HVEDR data available on commercial vehicles. How to use various methodologies for accessing and imaging data from HVEDRs while preserving the data in its original electronic format within the control module. Compile documentation of the vehicle and the imaged HVEDR data to properly establish foundational facts that tie the data to the vehicle and to ensure the reliability of incident specific data. To properly interpret data from HVEDRs and understand the limitations of the data. Analyze HVEDR data in the context of collision reconstruction.