

Mr. Niemann specializes in mechanical system failure analysis, vehicle systems analysis, construction defect investigations, product defects, firearms technology, unmanned aerial systems, and the reconstruction of accidents involving motor vehicles, cranes, forklifts, tractors, heavy equipment and pedestrians. He received a Bachelor of Mechanical Engineering from the University of Central Florida in 2017 and is a Professional Engineer in the State of Florida. Mr. Niemann has experience in engineering consulting, project management for construction projects, traffic accident reconstruction and mechanical systems design and failure analysis. Mr. Niemann employs leading edge technologies in the preservation of evidence and the reconstruction of accidents. In addition, Mr. Niemann has several years of experience in the electrical, construction and maintenance industries, and in the analysis of failures and design of structural, generators, remote radiators, engines, HVAC, plumbing, pumps, pool construction, pool design, electrical and mechanical systems.

Licensure and Certification

- Professional Engineer - Florida, #93666
- sUAS Remote Pilot in Command – FAA, #4229314
- SolidWorks Professional Core - C-PS6AWQRGRQ
- Certified Bosch Crash Data Retrieval System Operator

Formal Education

- Bachelor of Science in Mechanical Engineering, Mathematics Minor, University of Central Florida, 2017
- Associates Degree, Engineering Transfer Plan, Lake Sumter State College, 2012

Professional Development

- Advanced Florida Building Code 8th Edition – Mechanical, 2025
- Ethics for Florida Engineers – Thomas Sputo, 2025
- Simpson Strong-Tie Training – Simpson Virtual Training Summit, 2024
- Structural Wood Screws – Performance – Simpson, 2024
- Using and Understanding Evaluation Reports – International Code Council, (ICC)/Simpson, 2024
- High Winds and High Stakes: Lessons from the Field – Auburn University/Simpson, 2024
- Selection and Design of Simpson Strong Tie Concrete Anchors – Simpson, 2024
- Peer Review at National Academy of Forensic Engineers – NAFE, 2024
- “Artificial Intelligence in Forensic Engineering...” – NAFE, 2024
- “Applying Reverse Projection Photogrammetry in Forensic Engineering” – NAFE, 2024

- “Failure of Climbing Treestand Due to Corrosion and Selective Leaching of Cable’s Galvanic Layer...” – NAFE, 2024
- “Improving the Forensic Engineering Practice for Property Casualty Losses” – NAFE, 2024
- “Examples of Using Experimental Design Techniques to Solve Field Problems” – NAFE, 2024
- “Beyond the Building Code: A Forensic Approach to Construction Defect Evaluation” – NAFE, 2024
- “Forensic Engineering Analysis of a Residential Fire caused by an Open Neutral” – NAFE, 2024
- “Forensic Engineering Analysis of Abrasive Additives...” – NAFE, 2024
- FORScan for Windows: Vehicle Programming Software and Diagnostics Tools – FORScan, 2023
- Advanced Maintenance of Traffic FDOT – Florida Safety Council, 2023
- HAAG Certified Residential Roof Inspector – HAAG Education, 2022
- OSHA 20 ET&D Leadership - Construction Safety and Health 2022
- Weights and Forces Training - SEC, 2022
- OSHA 10 for Construction - Construction Safety and Health 2021
- Crane Selection and Rigging - SEC, 2021
- Energized Construction Training - Live Line Work Procedures, Quanta Energized Services, 2021
- Photomodeler Aerial Photogrammetry sUAS, PhotoModeler 2021
- Bosch Crash Data Retrieval System Operator, Crash Data Group, Inc., 2019
- Commercial Vehicle Brake Systems, Navistar Proving Grounds, New Carlisle, IN 2019
- Heavy Vehicle Traffic Accident Reconstruction, Northwestern University, 2019
- Hyundai and Kia Crash Data Operator, Kimley-Horn & Associates, 2018
- Crash Investigation, Northwestern University, 2018
- Florida DOT Maintenance of Traffic, Central Florida Safety Council, 2017
- SolidWorks Professional Core Certification, Dassault Systèmes, 2017
- SolidWorks Computational Fluid Dynamics, Dassault Systèmes, 2017
- Ansys Computational Fluid Dynamics, Ansys, 2017
- SolidWorks Finite Element Analysis, Dassault Systèmes, 2017
- Photomodeler Photogrammetry Professional Training for Collision Investigation, PhotoModeler, 2017
- Design and Selection of Low-Pressure Air Transport Systems, UCF, Orlando, FL, 2017
- Regolith Redistribution System, NRMCC Swamp Works Lab, Cape Canaveral, FL 2017
- Gyroscope Technology and Applications, IDEAS Lab, UCF, Orlando, FL, 2017
- Ceramic, Glass and Stone Tile Installation, TCNA, 2017

- Machine Design I&II, UCF, Orlando, FL, 2017
- Fluid Mechanics I&II, UCF, Orlando, FL, 2017
- Heat Transfer I&II, UCF, Orlando, FL, 2017
- Material Selection and Design, UCF, Orlando, FL, 2017
- Mechanical Measurements, UCF, Orlando, FL, 2016
- Solid Mechanics, UCF, Orlando, FL, 2016
- Material Science, UCF, Orlando, FL, 2016
- Thermodynamics, UCF, Orlando, FL, 2016
- Vibrations and Controls, UCF, Orlando, FL, 2015
- Computer Modeling Methods, UCF, Orlando, FL, 2015
- Engineering Analysis Dynamics, UCF, Orlando, FL, 2015
- Engineering Analysis Statics, UCF, Orlando, FL, 2015
- Electrical Systems, UCF, Orlando, FL, 2014
- Probability and Statistics, UCF, Orlando, FL, 2014

Professional Affiliations

- National Association of Forensic Engineers, (NAFE), Associate Member, (2023- Present)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Associate (2018 – present)
- American Society of Mechanical Engineers (ASME), Member (2014 – present)
- BSA Eagle Scout, (2010- Present)

Professional Experience

- Mechanical Engineer, Partner, Áreté Forensics, Orlando, FL 2022 - Present
- Project Manager, Service Electric Company, Leesburg, FL 2020 - 2022
- Mechanical Engineer, Forensic Engineering Technologies, LLC, Orlando, FL, 2020
- Mechanical Design and Forensic Analyst, Kimley-Horn and Associates, Inc., Orlando, FL, 2017 – 2020
- Engineering Design Intern, NASA, Cape Canaveral, FL, 2017 – 2018
- Construction Worker, Waterman Construction Corporation, Umatilla, FL, 2012 – 2015