Curriculum Vitae Shane W. Niemann, P.E.



Mr. Niemann specializes in mechanical system failure analysis, construction defect investigations, and the reconstruction of accidents involving motor vehicles, forklifts, tractors, 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, HVAC, plumbing, 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

- 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

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- SolidWorks Computational Fluid Dynamics, Dassault Systèmes, 2017
- SolidWorks 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, NRMC 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

Professional Affiliations

- 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, 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