

Mr. Thomazin is a licensed professional engineer specializing in mechanical and electrical systems. His work experience includes mechanical engineering roles in software development, manufacturing, consulting, and academia. He is a board-certified member of the National Academy of Forensic Engineers (NAFE), holding the designation of Diplomate Forensic Engineer (DFE). With a broad range of expertise in manufacturing, safety engineering, structural and mechanical design, reliability, computer-aided engineering, consulting, and project management, he offers comprehensive services. His areas of focus include vehicle accident reconstruction, farm accidents, structural and mechanical systems, product liability, premises liability, failure analysis, and finite element modeling.

As an experienced engineering consultant spanning multiple industries, Mr. Thomazin has successfully designed and evaluated various types of buildings, including agricultural, commercial, and metal structures as well as foundations. He also possesses expertise in the assessment of agricultural and commercial machinery, HVAC systems, and plumbing systems. By applying engineering principles and physics, he conducts forensic evaluations of machinery, crash investigations and reconstructions, as well as consumer product assessments.

With a notable background as a senior forensic engineer and as a business partner, Mr. Thomazin is a seasoned troubleshooter who brings practical experience to projects. Additionally, he has served as an Adjunct Engineering Instructor, teaching courses on Statics, Introduction to Engineering, Calculus II, and Basic Engineering Circuit Analysis at Central Community College in Columbus, NE. Prior to this, he worked as a design and project engineer. Mr. Thomazin also served as a Military Police Lieutenant in the U.S. Army Reserves.

Licensure and Certification

- Licensed Professional Engineer - Florida, Colorado, Kansas, Missouri, Nebraska
- Board Certified Diplomate in Forensic Engineering by NAFE, #1188
- CXLT, Certified XL Tribometrist, 2023
- ACTAR, Accredited Traffic Accident Reconstructionist, #3370
- Certified Crash Data Retrieval System Technician and Data Analyst, Crash Data Group, 2021
- Certified Documents Technologist, The Construction Specifications Institute
- Certified in Traffic Accident Reconstruction, Northwestern University Center for Public Safety
- Certified in Vehicle Dynamics, Northwestern University Center for Public Safety
- Lean Six Sigma Certificate, Central Community College

Formal Education

- Master of Science in Mechanical Engineering, University of Nebraska-Lincoln, 1993
- Bachelor of Science in Mathematics and Statistics, University of Nebraska-Lincoln 1990

Professional Experience

- Partner, Áreté Forensics, Orlando, FL 2023 – Present
- Forensic Engineer, Haag Global, Inc., Orlando, FL, 2022 - 2023
- Senior Engineer III, J.S. Held, LLC, Orlando, FL, 2021 – 2022
- Project Manager, Forensic Engineering Technologies, LLC, Orlando, FL, 2020
- Owner/President, REDI Engineering, Inc., Columbus, NE, 2006 - 2020
- Contract Engineer, Keystone Experts + Engineers, Castle Rock, CO, 2019 - 2020

- Contract Engineer, Due Diligence Associates, Tallahassee, FL, 2014 - 2020
- Adjunct Engineering Instructor, Central Community College, Columbus, NE, 2012 - 2015
- Project Manager and Design Engineer, Behlen Manufacturing, Columbus, NE, 2003 - 2006
- Mechanical Engineer: Product Development, Finite Element Solutions, Columbus, NE, 2002 - 2003
- Design & Project Engineer, RK Aerials, Fremont, NE, 2002 - 2003
- Finite Element Implementation Consultant, Parametric Technology Corp., Boston, MA, 1998 - 2000
- Software Engineer – ABAQUS Engineer, Dassault Systems, Pawtucket, RI, 1994 -1998
- Military Police – Lieutenant, U.S. Army Reserve, 1988 – 1998

Professional Development

- Forensic Engineering and Analytical Techniques, NAFE Summer Conference July 2024
- Forensic Engineering and Analytical Techniques, NAFE Winter Conference January 2024
- Certified XL Tribometrist (CXLT), Excel Tribometers, LLC 2023
- Commercial Vehicle Crash Investigation - Level I, Institute of Police Technology and Management, 2022
- Advanced Human Factors in Traffic Crashes, Crash Safety Solutions LLC, 2021
- How to use the Bosch CDR Pro Tool Kit, Crash Data Group Inc., 2021
- How to Perform a CDR Direct-to-Module Download, Crash Data Group Inc., 2021
- Visual Analysis Training, Integrated Engineering Software, 2018
- Ethanol as the Renewable Naphtha: Chemicals via Catalytic Upgrade of Ethanol, NeNSPE, 2018
- SEAK Expert Witness Conference, SEAK, 2017
- Traffic Crash Reconstruction—1, Northwestern University, 2016
- Vehicle Dynamics, Northwestern University, 2015
- Communicating Clearly making Communications Interesting and Compelling, Education to Go, 2014
- Project Delivery Practice Guide, The Construction Specifications Institute, 2012
- Communicating Technical Ideas Persuasively, NSPE, 2011
- Annual Conference, NeNSPE, 2011
- Roofing Systems, Firestone Building Products, 2010
- RRC Review and Update, Roof Consultants Institute, 2010
- Anatomy of a Construction Claim, NSPE, 2009
- Small Wind Generator Installations, NSPE, 2009
- Comparing the Contract Documents, NSPE, 2009
- RCI International Convention & Trade Show, Roof Consultants Institute, 2008
- Plan Review for the Commercial Provisions of the 2003 ICC International Energy Code, Nebraska Energy Office, 2008
- General Topics in Forensic Engineering, NAFE Winter Annual Meeting, 2007

- Commercial Building Inspections, Carson Dunlop Weldon & Associates, 2006
- Steel Design Update, AISC, 2006
- Seismic Provisions, AISC, 2006
- Six Sigma, Lean, and Root Cause Analysis, Central Community College, 2004

Professional Affiliations

- National Academy of Forensic Engineers, Member
- National Academy of Building Inspection Engineers, Member
- National Society of Professional Engineers, Member
- Society of Automotive Engineers, Member
- American Society of Heating, Refrigerating and Air-conditioning Engineers, Member
- American Society of Mechanical Engineers, Inactive Member
- American Society of Civil Engineers, Inactive Member
- American Institute of Steel Construction, Inactive Member
- Engineers without Borders, Inactive Member

Honors and Awards

- Director Northeastern Nebraska Chapter of Professional Engineers, 2017 & 2008
- President Northeastern Nebraska Chapter of Professional Engineers, 2016 & 2007
- ARMY Achievement Medal

Teaching and Curriculum Development

Central Community College – Columbus, Nebraska

- STEM Transfer – Courses Taught: Statics, Introduction to Engineering, Calculus II, Basic Engineering Circuit Analysis

Journal Articles

- “The Influence of Imperfections on the Torsional Strength of Stepladders,” Thomazin, J.A., B. Webster, and S. Kosaraju, PhD., presented at the NAFE Summer Annual Meeting, Ann Arbor, Michigan, July 2024. Paper in review.

Selected Publications

- “Design Guide for Flat-Storage Building Systems,” J. Thomazin, Nucor Building Systems, Indiana
- “Mechanical Systems,” J. Thomazin, Central Community College Workforce Training