

CURRICULUM VITAE OF TIMOTHY M. KREHBIEL, P.E.

April 2025

I. General Information

A. Position Lead Engineer
 Semke Forensic
 100 North Clayview Drive, Suite B
 Liberty, Missouri
 Telephone: 816-415-2020

II. Professional Summary

A. Education: Bachelor of Science
 Mechanical Engineering
 University of Missouri
 Columbia, Missouri
 2007

B. Experience:

January 2025 to Present

Position: Lead Engineer
Semke Forensic
100 North Clayview Drive, Suite B
Liberty, MO

Responsible for mechanical engineering projects with emphasis in vehicular accident reconstruction, failure analysis, and mechanical design analysis.

January 2020 to January 2025

Position: Senior Mechanical Engineer
Semke Forensic
100 North Clayview Drive, Suite B
Liberty, MO

Responsible for mechanical engineering projects with emphasis in vehicular accident reconstruction, failure analysis, and mechanical design analysis.

September 2013 to January 2020

Position: Mechanical Engineer
Semke Forensic
100 North Clayview Drive, Suite B
Liberty, MO

Responsible for mechanical engineering projects with emphasis in vehicular accident reconstruction, failure analysis, and mechanical design analysis.

July 2011 to September 2013

Position: Mechanical Engineer
Kiewit Power Engineers
Lenexa, KS

Responsible for obtaining accurate pricing for engineered equipment, and working with vendors to find the best and most cost-effective solution for a given situation. Prepared engineering specifications and requests for quotations.

July 2010 to July 2011

Position: Piping Estimator
Kiewit Power Constructors
Lenexa, KS

Performed accurate pipe estimates. Addressed value engineering and constructability concerns during early plant design. Led several projects, including creating a new estimating software system based on REVIT, and restructuring the server file folder structure to improve network security.

April 2009 to July 2010

Position: Field Engineer
Kiewit Power Constructors
Iatan, MO

Processed, tracked, documented, and billed change orders in the boiler, steam turbine, water treatment, and AQCS areas. Oversaw more than \$2.5M in change order work, with a 98.6% success rate on submitted change orders. Implemented new automated tracking spreadsheet for all change orders, which greatly reduced reliance on physical paper files, and resulted in significant time and money savings for the company.

January 2008 to April 2009

Position: Piping Estimator
Kiewit Power Constructors
Overland Park, KS

Provided estimates on many types of jobs including coal, natural gas, and solar power plants. Responsible for more than \$35M in piping as Lead Piping Estimator for a simple cycle power plant estimate in Spring Hills, Florida. Led a company-wide cost tracking system revision for three current, and all future, AQCS jobs.

May 2007 to August 2007

Position: Intern, EID (Engineer in Development)
GE Infrastructure-Energy
Slater, MO

Participated in product development, material handling, environmental, health and safety projects in an industrial filter bag manufacturing plant. Applied Six Sigma, lean, and JIT practices. Produced parts for new prototype manufacturing equipment in the machine and welding shop. Implemented numerous changes to the cage welding assembly process, resulting in greater safety and productivity.

May 2005 to December 2006

Position: Mechanic
Advantage Powersports
Kansas City, MO

Performed all aspects of vehicle maintenance and repair, including electrical troubleshooting and engine repairs. Vehicles included all brands (primarily Honda, Yamaha, and Suzuki) of motorcycles, ATVs, watercraft, and scooters.

III. Seminars and Technical Courses Attended

2013 – IPTM Bosch CDR Tool Technician Training
2014 – Missouri Division of Fire Safety Fire Investigator Course
2014 – Residential Electrical Systems, The International Association of Arson Investigators
2014 – Basic Electricity, The International Association of Arson Investigators
2015 – Event Data Recorder Use in Traffic Crash Reconstruction
2015 – Kansas Highway Patrol Crash Data Retrieval (CDR) Analyst Course
2015 – SAE Accessing and Interpreting Heavy Vehicle Event Data Recorders
2016 – FARO Technologies Laser Scanner
2018 – IPTM Investigation of Motorcycle Crashes
2020 – Electric Vehicles 101
2020 – Motor Vehicle Accident Reconstruction - Special Topic 6, Introduction to Bumper Damage Analysis
2020 – Reinventing the Wheel
2020 – Professional Ethics for Engineers
2020 – Design and Problem Solving Using Computer Simulation
2022 – Mechanics of Materials
2022 – Tucker 48: The Car of Tomorrow
2024 – Global Positioning System 101
2024 – Mechanical Design of Overhead Lines
2024 – HVAC - Variable Air Volume Systems
2024 – Thermodynamics, Heat Transfer, and Fluid Flow
2024 – Coating Types and Characteristics

IV. Professional Affiliations

Society of Automotive Engineers (SAE)

V. Professional Registration

Registered Professional Engineer in the States of Missouri, Kansas, Iowa, Arkansas,
and Nebraska
FAA Certified Unmanned Aircraft System (UAS) Pilot
FAA Certified Private Pilot