

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

July 2024

I. General Information

A. Position Senior Mechanical 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 2020 to Present

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 – 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, John C. Huang, PH.D., P.E.
- 2020 – Motor Vehicle Accident Reconstruction - Special Topic 6, Introduction to Bumper Damage Analysis, Peter Chen, P.E., CFEI, ACTAR
- 2020 – Reinventing the Wheel, Jeffrey Syken
- 2020 – Professional Ethics for Engineers, John C. Huang, Ph.D., P.E.
- 2020 – Design and Problem Solving Using Computer Simulation, Robert P. Jackson, P.E.
- 2022 – Mechanics of Materials, H. Chen, Ph.D., P.E.
- 2022 – Tucker 48: The Car of Tomorrow, Jeffrey Syken

IV. Professional Affiliations

Society of Automotive Engineers (SAE)

V. Professional Registration

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