

**Professional Resume**  
**of**  
**DERON KIP MAGRUDER, P. E.**

February 2024

**I. General Information**

Mechanical Engineer  
Schaefer Engineering, Inc.  
Wentzville, Missouri

**II. Professional Summary**

**A. Education:** Bachelor of Science - 2004  
Mechanical Engineering  
Southern Illinois University Edwardsville  
Edwardsville, Illinois

**B. Experience:**

February 2016 to Present  
Position: Mechanical Engineer  
Schaefer Engineering, Inc.  
Wentzville, Missouri

Responsible for mechanical engineering projects which include vehicular accident reconstruction, product failure analysis, and mechanical design analysis.

August 2007 to February 2016  
Position: Engineer  
Wainwright – A Division of Modineer Co. (formerly Wainwright Industries)  
Saint Peters, Missouri

Designed, installed, programmed, and maintained automatic assembly equipment for in-house production of high volume automotive stampings and welded assemblies. Equipment included multiple Fanuc / Lincoln robotic GMAW weld cells and several Fanuc robotic spot welding and material handling cells. Responsible for destructive and non-destructive testing of automotive welded assemblies including safety critical welds. Designed and programmed electronic semi-automated assembly test fixtures and other in-line error proofing devices. Created detailed operator work instructions, equipment setup sheets and visual aids for production personnel. Modified existing manufacturing processes to reduce risk and improve efficiency.

### **Experience - Continued**

January 2001 to August 2007

Position:               Mechanic and Team Engineer  
                              M B Motorsports  
                              (Mittler Brothers Machine and Tool)  
                              *NASCAR Craftsman Truck Series Team*  
                              Wright City, Missouri

Worked part time while attending SIUE and worked full time May 2004 through August 2007.

Built and maintained all equipment necessary for operation of a NASCAR Camping World Truck Series team including sheet metal fabrication, engine and drivetrain installation, and chassis setup. Ordered parts and controlled inventory.

June 1997 to January 2001

Position:               Field Service Technician  
                              Fisher Service Company  
                              St. Louis, Missouri

Performed onsite testing of industrial control valves and related instrumentation. Provided maintenance recommendations and trained customer maintenance personnel. Maintained and repaired industrial control valves, pneumatic and hydraulic actuators, and related instrumentation for multiple industrial customers.

### **III. Professional Registration**

Registered Professional Engineer in the State of Missouri (2010)

Registered Professional Engineer in the State of Illinois (2018)

Registered Professional Engineer in the State of Arkansas (2018)

SAE Accident Reconstruction Certification (2019)

Federal Aviation Administration, Airman Certificate, Remote Pilot, Small Unmanned Aircraft System, Certificate No. 4155686

### **IV. Professional Affiliations**

Society of Automotive Engineers (SAE)

National Association of Professional Accident Reconstruction Specialist (NAPARS)

Illinois Association of Technical Accident Investigators (IATAI)

V. **Continuing Education**

- 2008 - Lincoln Electric Fanuc Basic Robotic Programming, Lincoln Electric, Cleveland, OH
- 2010 - Professional Engineering Refresher Course – Mechanical Engineering, SCCC Workforce Development, Cottleville, MO
- 2010 - AutoCAD Electrical 2011 Fundamentals, Hagerman and Company, St. Louis, MO
- 2011 - DirectLogic Programming Advanced Level Interconnecting Automation, Cumming, GA
- 2013 - Microsoft Excel Basics and Beyond the Basics, Fred Pryor Seminars, St. Charles, MO
- 2014 - Microsoft Excel Advanced Training, Fred Pryor Seminars, St. Louis, MO
- 2014 - Rockwell Automation Control Logix Online Training, Rockwell Automation
- 2015 - Project Management Workshop, Fred Pryor Seminars, St. Charles, MO
- 2016 - Bosch Full CDR Technician Training (online), Institute of Police Technology and Management
- 2016 - SAE World Congress, Society of Automotive Engineers, Detroit, MI
- 2016 - Accessing and Interpreting Heavy Vehicle Event Data Recorders, SAE, Charlotte, NC
- 2016 - Vehicle Crash Reconstruction Methods, SAE, Scottsdale AZ
- 2017 - Human Factors in Traffic Crashes, Crash Safety Solutions, Fort Collins, CO
- 2017 - Faro Scanner and Scene Forensics Certified Training, Faro / Bobby Jones Associates, Inc., Wentzville, MO
- 2017 - Applying Automotive EDR to Traffic Crash Reconstruction, SAE, Troy, MI
- 2018 - EDR Summit, CSI and CDG, Houston, TX
- 2018 - Vehicle Dynamics For Passenger Cars and Light Trucks, SAE, Troy, MI
- 2019 - EDR Summit, CSI and CDG, Houston, TX
- 2019 - Reconstruction and Analysis of Motorcycle Crashes, SAE, Detroit, MI
- 2019 - SAE WCX World Congress, Society of Automotive Engineers, Detroit, MI
- 2019 - Accident Reconstruction, The Autonomous Vehicle and ADAS, SAE, Detroit, MI
- 2019 - Aerial Lift Operator Training, Safety Training Resources, Wentzville, MO
- 2019 - Working at Heights (Fall Protection), Federal OSHA Regulation 29CFR 1926.500 Subpart M Safety Training Resources LLC, Wentzville, MO
- 2019 - Forklift Operation, Safety Training Resources LLC, Wentzville, MO
- 2019 - Basic Rider Course, Motorcycle Safety Foundation, St. Charles, MO
- 2019 - Comprehensive Air Brake System Training, Bendix Spicer Foundation Brake LLC, Elyria, OH
- 2020 - IDRR User Forum and Training, Crash Safety Solutions, Las Vegas NV
- 2022 - Accessing and Interpreting Heavy Vehicle Event Data Recorders, SAE, Appleton, WI
- 2022 - Advanced Applications of Heavy Vehicle EDR Data, SAE, Oxnard, CA
- 2023 - The EDR and the Trailer Hitch, NAPARS Virtual Training
- 2023 - Cell Phone Data Collection and Data Retrieval, DRI Webinar
- 2023 - Working at Heights (Fall Protection), Safety Training Resources
- 2023 - Axon Investigate Operator Certification Training, Axon Training
- 2023 - A.D.A.S. and Accident Reconstruction, NAPARS Virtual Training
- 2024 - Response User Forum and Training, Driver Research Institute, Long Beach, CA