

# JOSHUA C. ROGERS, PE SENIOR CONSULTANT & SOUTHEAST REGIONAL VICE PRESIDENT

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Mr. Joshua Rogers is a Mechanical Engineer and Senior Consultant for Engineering Systems Inc. (ESi), where he assists the Automotive Research and Accident Reconstruction team. His professional experience includes failure analysis, machine design, process implementation for machine elements and subassemblies, and performance and analysis of bearing components and assemblies used in a variety of engineering applications including automotive, heavy truck, mining, construction, and agriculture. Mr. Rogers' expertise encompasses machine design, manufacturing technologies, and automotive systems analysis.

### **Areas of Specialization**

Bearing Design and Applications
Bearing Failure Analysis
Failure Analysis and Troubleshooting
Process and Machinery
Accident Investigation
Automotive Research
Mechanical Engineering
Mechanics and Materials
Design Process and Process Management
Accident Reconstruction

### **Education**

B.S., Mechanical Engineering, University of North Carolina-Charlotte

### **Licensed Professional Engineer (P.E.)**

State of North Carolina .....License No. 046054

### **Professional Affiliations**

American Society of Mechanical Engineers (ASME) Society of Automotive Engineers (SAE)



#### **Positions Held**

#### **Engineering Systems Inc., Charlotte, North Carolina**

Senior Consultant, 2020 to Present Southeast Regional Vice President, 2024 to Present Manager of North Carolina Operations, 2019 to 2024 Senior Staff Consultant, 2018 to 2020 Staff Consultant, 2015 to 2018

#### Schaeffler Group, Fort Mill, South Carolina

Applications Engineer, 2011 to 2015

### **Specialized Training & Certifications**

Bendix Comprehensive Air Brake Systems Training, 2015

FARO Focus 3D Scanner Certification Program, 2015

Northwestern University Accident Investigations Course, 2016

Vehicle Crash Reconstruction Methods, SAE International, 2016

PC Crash Training, 2016

PC Crash Training, 2017

Human Factors in Traffic Crash Reconstruction, Institute of Police Technology & Management (IPTM), 2017

PC-Crash Advance Training, 2018

Applied Vehicle Dynamics Course, Autobahn Country Club, PowerTrain Technology & Precision Auto Research, 2018

Bosch CDR Tool Technician Training, Institute of Police Technology & Management (IPTM), 2018

Traffic Crash Reconstruction for the Forensic Engineer, Northwestern University, 2019

Traffic Signal Timing Records Interpretation & Analysis, Traffic Signal Academy, University of Tennessee, 2020

Accessing and Interpreting Heavy Vehicle Event Data Recorders, SAE International Professional Development Program, Oxnard, California, 2021

Commercial Vehicle Crash Investigation, Institute of Police Technology and Management, University of North Florida, Jacksonville, Florida, 2022

Event Data Recorder Update and Analysis, Ruth Consulting, 2023

#### **Publications/Presentations**

#### **Publications:**

"Sensitivity Analysis of Various Vehicle Dynamic Simulation Software Packages Using Design of Experiments (DOE)", R. Matthew Brach, Shawn Capser, Emmanuel Jay Manuel, Joshua Rogers, Robert Bailey, Paper 2020-01-0639, SAE International, Warrendale, PA, 2020.



#### **Presentations:**

- Rogers JC, "Bearings 101", Schaeffler Group Provided to Hilliard Corporation, Elmira, NY, 2013
- Rogers JC, "Bearings 101", Schaeffler Group Provided to Vermeer Corporation, Pella, IA, 2014
- Rogers JC, Stern AR. "Low-Speed Vehicle Collision Analysis." FCCI Florida Claims Seminar, Sarasota, Florida: October 9, 2018.
- Rogers, JC, Stern, AR. "Heavy Truck Rollovers: Occupant Injury & Kinematics." NCADA Webinar, September 14, 2022.
- Rogers, JC, "Integrating Vehicle and Occupant Simulations with Human Factors", NCADA Fall Meeting, October 6, 2023.

## **Strategic Task Groups and Committees**

Member of SAE Data Collection and Archiving Standards Committee, 2017