

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.

Education

BS, Mechanical Engineering. University of North Carolina at Charlotte. 2011

Licenses & Certifications

- State of North Carolina P.E. License 046054

Positions Held

Engineering Systems Inc., Charlotte, North Carolina

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

Schaeffler Group, Fort Mill, South Carolina

- Applications Engineer, 2011–2015

Continuing Education

- FARO Focus 3D Scanner Certification Program – 2015
- Bendix Comprehensive Air Brake Systems Training – 2015

Contact Information

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Charlotte

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Areas of Specialization

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

- **Vehicle Crash Reconstruction Methods** – SAE International, 2016
- **Northwestern University Accident Investigations Course** – 2016
- **PC Crash Training** – 2016
- **PC Crash Training** – 2017
- **Human Factors in Traffic Crash Reconstruction** – Institute of Police Technology & Management, 2017
- **Bosch CDR Tool Technician Training** – Institute of Police Technology & Management, 2018
- **PC Crash Advance Training** – 2018
- **Applied Vehicle Dynamics Course** – Autobahn Country Club, PowerTrain Technology & Precision Auto Research, 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, 2021
- **Commercial Vehicle Crash Investigation** – Institute of Police Technology and Management, University of North Florida, 2022
- **Event Data Recorder Update and Analysis** – Ruth Consulting, 2023
- **Hyundai-Kia & Tesla EDR Tools Technician**, 2025
- **Passenger Restraint Safety Systems**, 2025

Professional Affiliations/Honors

American Society of Mechanical Engineers

- Member, 2005 – Present

Society of Automotive Engineers

- Member, 2005 – Present

SAE Data Collection and Archiving Standards Committee

- Member, 2017 - Present

Publications

“Sensitivity Analysis of Various Vehicle Dynamic Simulation Software Packages Using Design of Experiments (DOE),” R.M. Brach, S. Casper, E.J. Manuel, **J. Rogers**, and R. Bailey, SAE Technical Paper 2020-01-0639, 2020.

Presentations

“Bearings 101,” **J. Rogers**, Hilliard Corporation, Schaeffler Group, Elmira, NY, 2013.

“Bearings 101,” **J. Rogers**, Vermeer Corporation, Schaeffler Group, Pella, IA, 2014.

“Low-Speed Vehicle Collision Analysis,” **J. Rogers** and A. Stern, FCCI Florida Claims Seminar, Sarasota, FL, October 2, 2018.

“Heavy Truck Rollovers: Occupant Injury & Kinematics,” **J. Rogers** and A. Stern, NCADA Webinar, September 14, 2022.

“Integrating Vehicle and Occupant Simulations with Human Factors,” **J. Rogers**, NCADA Fall Meeting, October 6, 2023.