

Professional Resume
of
BENJAMIN L. RACKERS, P. E.

September 2026

I. General Information

Mechanical Engineer
Schaefer Engineering, Inc.
Wentzville, Missouri

II. Professional Summary

A. Education: Bachelor of Science, Summa Cum Laude – 2018
Mechanical Engineering
Missouri University of Science and Technology
Rolla, Missouri

B. Experience:

May 2018 to present
Position: Mechanical Engineer
Schaefer Engineering, Inc.
Wentzville, Missouri

Responsible for mechanical engineering analyses, including product failure mode evaluation, vehicular accident reconstruction, and fire/explosion investigation, with emphasis in image and video reconstruction, advanced engineering calculations, system data analysis, and 3D reconstructive techniques.

May 2016 to Aug 2017
Position: Research Assistant
Missouri University of Science and Technology
Rolla, MO

Developed a computationally efficient thermal profile superposition approach for predicting the thermal response of metal powder beds for Selective Laser Melting (SLM) additive manufacturing. Built and extensively tested a modular computation pipeline for discrete, transient, scalable spatiotemporal thermal histories. Developed a correction model to compensate for nonlinear properties and dependent thermal coefficients for basic scan-path geometries.

III. Professional Registration

Registered Professional Engineer (PE) registered in the State of Missouri

IV. Professional Affiliations

American Society of Mechanical Engineers (ASME)
Society of Automotive Engineers (SAE)
International Association of Arson Investigators (IAAI)
International Association of Forensic & Security Metrology (IAFSM)

V. Technical Skills

Extensive experience with the following analytical techniques and software.

Terrestrial laser scanning and point clouds:	FARO Scene, CloudCompare
Drone photogrammetry and meshes:	Agisoft Metashape, MeshLab
CAD reconstruction and modeling:	FARO Zone, Autodesk Inventor, FreeCAD, Blender
Video and image analysis:	AXON Investigate, FFMPEG, ImageJ, Adobe Suite
X-Ray and CT scan analysis:	NOVO DR, myVGL, Industrex, NorthStar efX-CT
Vehicular accident reconstruction:	Response (Human Factors - Vehicular)
Satellite and GPS systems:	QGIS, Google Earth Pro, Emlid Studio
Engineering calculations:	MathCAD, Excel
Data acquisition:	DATAQ, DAQView
Data processing and visualization:	Python, MATLAB, D3.js

VI. Continuing Education

2025 – Driver Research Institute Response User Forum
Driver Research Institute
2023 – Axon Certified Operator, Examiner, and Metrologist Training
AXON
2023 – Mobile LIDAR and Recon-3D training
Recon-3D
2021 – Asbestos Operations & Maintenance, Environmental Safety
BlueSky
2020 – DRI and ESI The Art of Remote Inspections
DRI
2019 – Fall Prevention Training and Working at Heights
Safety Training Resources
2019 – Forklift Operation & Safety Training
Safety Training Resources