



Brian Haygood, P.E.

Consulting and Forensic Engineer

System Engineering And Laboratories (SEAL)

QUALIFICATIONS

• Mechanical Design and Analysis • Finite Element Analysis (FEA) • Vehicle Systems and Dynamics • Fuel Systems and Fuel Contamination • Crash Data Retrieval (CDR) and Analysis • Off-road and On-road Racing Vehicle Design and Analysis. • Accident Investigation and/or Reconstruction for Oil Field, Automotive, Trucking, Boating, Aviation, Personal Watercraft, and ATVs. • Residential and Commercial Construction Analysis • Computer Aided Design and Drafting (CADD) • Solid Modeling and Visualization • Scanning Electron Microscope (SEM) Operator

TEACHING EXPERIENCE

Pro/Engineer Solid Modeling/CAD, Teaching Assistant, University of Pittsburgh.
Professional Engineering (PE) and Fundamentals of Engineering (FE) exam review course instructor, Edumind, Inc.
Accredited Instructor, CE Classes in Wind Storm Damage.

CERTIFICATIONS

- PE, Professional Engineer, Texas, #100337
- PE, Professional Engineer, Louisiana, #34803
- PE, Professional Engineer, Arkansas, #14229
- ASEL, Private Pilot License
- TWIC - Transportation Worker Identification Credential
- Class B & M (Heavy Vehicle & Motorcycle) Driver's License

MEMBERSHIPS

TSPE, Texas Society of Professional Engineers
NSPE, National Society of Professional Engineers
SAE, Society of Automotive Engineers, 1999-2000
UT San Antonio President: Chassis & Suspension

PUBLICATION

Haygood, Brian W. and Mukesh R. Joshi.
"Statics." In FE Civil Exam Review Guide, 1st ed., 99-128. Dublin, OH: EduMind, Inc., 2020.
Haygood, Brian W. and Mukesh R. Joshi.
"Dynamics." In FE Civil Exam Review Guide, 1st ed., 129-158. Dublin, OH: EduMind, Inc., 2020.

EDUCATION

Rice University, Bachelor of Arts, Biology and Psychology, 1997.
University of Pittsburgh, Bachelor of Science, Mechanical Engineering, 2001.
HVE Forum, San Antonio, Texas, 2007.
Crash Data Retrieval Technician and Analysts, Fort Worth, Texas, 2006.
ARAS 360E Advanced 3D Computer Diagramming for Crash Reconstruction, Conroe, Texas, 2011.
SAE Heavy Vehicle Event Data Retrieval and Analysis, 2015.
Event Data Recorder Summit, Houston, Texas, 2019.

EXPERIENCE

2003 - Present Consulting Forensic Engineer, System Engineering And Laboratories (SEAL)

2002 Application Engineer, Algor Inc., Pittsburgh, PA.
ALGOR Inc. is the world's leading finite element analysis software company, providing static and dynamic analysis for solids, fluids, electrical and heat currents. Responsibilities included assisting domestic and German speaking ALGOR users in producing models in various CAD packages, converting them to F.E.A. models.

2000 Staff Engineer, Automotive Design & Composites, Ltd., San Antonio, Texas. Responsibilities included Computer Aided Design (using Pro/Engineer) and Finite Element Analysis (using Pro/Mechanical) of vehicle frame and chassis components.

1999 - 2000 Staff Engineer, Inno Tech Engineering Services, San Antonio, Texas. Responsibilities included Vehicle distortion and trajectory analysis, computer aided drafting using AutoCAD, programming in Excel; site surveying, incident investigation, witness interviews and formal report writing.