patrick@3axisllc.com 5929 Knight Ave Tuscaloosa, Alabama 35405 (205) 758-4488

# Patrick Davis, B.S.M.E, P.E

**Education** Bachelor of Science, Mechanical Engineering, May 2019

University of Alabama, Tuscaloosa, Alabama

**Registration** Licensed Professional Engineer, Alabama, #51553

#### Experience

2019-Present, Engineer, 3Axis Engineering, LLC, Tuscaloosa, Alabama

- Assisted in reconstruction of over 400 accidents involving automobiles, motorcycles, commercial vehicles, and trains
- Presented engineering work to attorneys and other clients
- Developed presentations for deposition and trial testimony
- Performed vehicle and site inspections including commercial vehicles for out-of-service conditions
- Downloaded passenger and commercial event data recorders
- Developed simulations of vehicle collisions and handling maneuvers
- Reconstructed evidence using computer and field photogrammetry techniques
- Created 3-Dimensional models of accident sites, and vehicles
- Used various software in the reconstruction and analysis of collisions and vehicle handling
- Developed wireless elevated photography system for use in reconstructions, simulations, and animations
- Designed, instrumented, performed and analyzed vehicle crash tests
- Developed and Implemented GPS systems for use in vehicle testing, scene measurement and photogrammetry

## **Co-op Position, Mechanical Engineering** (Spring 2018, Fall 2018)

Austal USA, Mobile, Al – Ship builder with contracts for the United States Navy

- Conducted analysis of potable water pipe systems to meet requirements for flow rate and temperature
- Developed documentation to educate new users on the use of finite element analysis software
- Assisted with design of HVAC system on Navy frigate contract

### **Co-op Position, Mechanical Engineering** (Spring 2016)

Shaw Industries, Dalton Georgia

Plant WE, Dalton, Georgia

- Updated CAD drawings of the compressed airline system for the plant
- Created concept drawings and 3D models for equipment moves and potential new pieces of equipment
- Created solutions for malfunctioning equipment to improve safety and speed of carpet inspection processes

#### **Professional Development Courses and Continuing Education**

- EDC Simulations Training Course, Miami, FL; 2019
- Crash Data Retrieval Operators Course Bosch Crash Data Retrieval System, Montgomery, AL; 2019
- Crash Data Retrieval System Analysis and Applications Course, Montgomery, AL; 2019
- SCARS Conference setup and instrument crash testing, Charleston, SC; 2021
- Cloud Compare Training Course; 2021
- Photogrammetry Training Course; 2021
- SCARS Conference setup and instrument crash testing, Charleston, SC; 2022
- HVE Forum, Fort Meyers, FL; 2023
- SCARS Conference setup and instrument crash testing, Charleston, SC; 2023
- PCARS Conference setup and instrument crash testing, Erie, PA; 2023
- MATAI Conference setup and instrument crash testing, Livonia, MI; 2023
- SCARS Conference setup and instrument crash testing, Charleston, SC; 2024
- SAE Reconstruction Training Course, Detroit, MI; 2024
- Virtual CRASH Essentials + Animations Training Course; 2024
- MATAI Conference setup and instrument crash testing, Livonia, MI; 2024

### Awards, Honors, Memberships

- The University of Alabama Dean's List
- The University of Alabama President's List
- Golden Key International Honour Society