

Mr. Luke Papa is a recent mechanical engineering graduate currently working in his first role as a Staff Consultant at Engineering Systems Inc. at the Omaha, Nebraska office. During his time at university, he developed a strong foundation in design, failure analysis, and manufacturing processes.

He specializes in mechanical design, CAD modeling, instrumentation, and product testing, with a growing interest in sustainable engineering solutions. Luke is passionate about applying his academic knowledge to real-world projects and developing practical skills in a collaborative team environment. He is eager to apply his skills in a dynamic engineering environment and continue growing as a professional in the field.

### Education

BS, Mechanical Engineering. University of Nebraska-Lincoln. 2025  
Passed F.E., May 2025

### Positions Held

#### Engineering Systems Inc., Omaha, Nebraska

- Staff Consultant, 2025 – Present

### Continuing Education

- Strain Gage Fundamentals, 2025
- DEWESoft Technical Training, 2026

### Project Experience

#### Investigations

##### Load Redistribution and Failure Mitigation

- Designed retrofit kit to redistribute structural loads and prevent weld point failures caused by cracking
- Conducted tensile and compression testing on a load frame to evaluate structural performance under varying stress conditions

##### Failure Analysis & Root Cause Investigation

- Performed root cause analysis to identify factors contributing to brake system failure

##### Instrumentation, Data Acquisition & Monitoring Systems

- Developed a data acquisition (DAQ) system for remote monitoring and analysis of strain gauge data

### Contact Information

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### ESi Omaha

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Omaha, NE 68110

### Areas of Specialization

- Mechanical Design & Evaluation
- Mechanical Testing
- CAD Modeling
- Fixture and Test Design
- Product Design & Analysis
- Failure Analysis
- Failure Analysis & Root Cause Investigations
- Instrumentation