Seth E. Honnigford

514 N 7th St, Lafayette, Indiana

E-mail: sehonnigford@gmail.com Phone: (217) 402-6805 Website: https://sethhonnigford.com/

Thesis master's student in Mechanical Engineering planning to graduate Summer of 2026. Interests in robotics, composite materials, additive manufacturing, and bio-inspired engineering.

Education:

B.S. in Mechanical Engineering (May 2024)
Purdue University, West Lafayette, IN (GPA 3.75/4.00)

M.S. in Mechanical Engineering (May 2026)
Purdue University, West Lafayette, IN (GPA 3.20/4.00)

Skills and Proficiencies:

- Foundational knowledge of C#, Python, MATLAB, EES, and Microsoft Office Suite
- Basic knowledge of Siemens NX, Solidworks, and Fusion
- Great communication and interpersonal skills
- Lots of experience with FDM 3D printing, some experience with SLA

Experience:

Research Assistant at UIUC (Summer 2021)

- Assisted two research groups throughout the summer at the University of Illinois Urbana-Champaign
- Worked on thermal image capturing for short exposure experiments
- Designed and tested two designs of a repeatable launcher used to consistently test grasshopper inspired gliders

Intern at Advanced Power Technologies (Summer 2022)

- Helped assemble electromechanical cabinets used for power generation and distribution
- Gained lots of experience working hands on and getting familiar with common tools
- Learned about split-phase and three-phase power generation and the reasons for its common use

Student Employee at Construction Engineering Research Laboratory (Summer 2023 – Summer 2024)

- Worked with the Army Corp of Engineers to develop software designed to help optimally maintain and replace buildings
- Continued to do remote work throughout the academic year

Graduate Researcher (Fall 2024 – Present)

- Performed research on additive manufacturing of carbon fiber composite materials, experimented with blends of short and long discontinuous fiber pellets

Projects:

Discord Bot (Fall 2020)

- Developed a discord bot that uses a web scraping package to get text and read out trivia questions from a database of existing questions

Senior Design Project (Spring 2024)

- Worked with a small team to develop a working prototype for a robot that can crawl on power lines and navigate around obstacles intended for autonomous power line inspection

Extracurriculars:

Member of Pi Tau Sigma (Spring 2024)

- Mechanical engineering honors society, helped run tutoring sessions and participate in service opportunities

Awards and Honors:

- Dean's List (Fall 2020-Spring 2024)