

JOSEPH HAENEL

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EDUCATION

Southern Illinois University Edwardsville
Bachelor of Science in Computer Science

Edwardsville, IL
Graduating: December 2024

- GPA: 3.71, Honors Student, Provost Scholar

TECHNICAL SKILLS

- Proficient: C++, Python
- Knowledgeable: PHP, C, SQL, JavaScript, TypeScript, SWI-Prolog, Scheme

WORK EXPERIENCE

Networking IT Intern

June 2023 - Present

Shelby Electric Cooperative / PWR-net / ShelbyFiber

Shelbyville, IL

- Assisted in network engineering and setup of our fiber company, establishing a robust infrastructure for high-speed connectivity.
- Managed network operations for our fixed wireless broadband company, enhancing performance and reliability of services.

Undergraduate Research Assistant

July 2023 - Present

Southern Illinois University Edwardsville

- Conducting a comparative analysis using machine learning and AI for enhanced detection and classification of tomato leaf diseases, improving agricultural diagnostics.
- Implemented machine learning models including AlexNet, ResNet50, and InceptionResNetV2 using **Keras** and **TensorFlow**, alongside Random Forest and K-Means algorithms.

Teaching Assistant

Jan. 2024 - Present

Southern Illinois University Edwardsville

- Teaching Assistant for **Machine Learning** and Human-Computer Interaction classes.

Computer Science Tutor

Aug. 2023 - Dec. 2023

Southern Illinois University Edwardsville

- Tutored students in the basics of **C++** and their understanding of computing principles.

PROJECTS

Reddit Thread Scraper

Aug. 2023 - Dec. 2023

Southern Illinois University Edwardsville

- Worked in a team to create 'Reddit-Destroyer', a **Python** project integrating **ChatGPT API** for Reddit thread sentiment analysis. Details at github.com/josephhaenel/Reddit-Destroyer.

Image Format Converter

Nov. 2023

Independent Project

- Developed 'ImageFormatConverter.py', a **Python** tool using **Pillow** to recursively convert image formats in directories, enhancing file management. Details at github.com/josephhaenel/ImageFormatConverter.

Social Media Weather App

March 2023

eHacks 2023

St. Louis, MO

- Collaborated in a team project to develop the backend in **PHP** for a unique weather app, integrating social media features for sharing nature and weather experiences.

VOLUNTEER WORK

Community Relations and Events Coordinator

May 2023 - Present

eHacks 2024

Edwardsville, IL

- Led community and sponsorship outreach for our event and maintained event website.

Guest Speaker in Computer Science

May 2023

Mt. Olive CUSD #5

Mt. Olive, IL

- Delivered a presentation to students in grades 4th - 8th on the fundamentals of computer programming.