JOSEPH HAENEL

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EDUCATION

Southern Illinois University Edwardsville — Edwardsville, IL

Bachelor of Science in Computer Science — Graduating: December 2024

- **GPA: 3.71**, **Honors Student**, Provost Scholar

TECHNICAL SKILLS

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

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, overseeing 1300+ CPEs (Customer Premises Equipment), which significantly enhanced the reliability of our 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

Odyssi – Senior Project — January 2024 - Present
Southern Illinois University Edwardsville — St. Louis, MO

- We're using the **Scrum** framework to develop and gamify the Odyssi web application, odyssi.io, to boost user engagement.

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.

VOLUNTEER WORK

Community Relations and Events Coordinator — May 2023 - Present
eHacks 2024 — Edwardsville, IL

- Led community and sponsorship outreach for our event to secure $5,000 in sponsorships.

Guest Speaker in Computer Science — May 2023
Mt. Olive CUSD #5 — Mt. Olive, IL

- Delivered a presentation on basic computer programming to students in grades 4-8.