Edward Wenschhof

McConnellsburg, PA ▪ 717-262-5672 ▪ edwenschhof@gmail.com

EDUCATION

Bachelor of Science in Computer Science and Applied Mathematics May 2025
Minor: German Studies
GPA: 3.99
Shippensburg University, *Shippensburg, PA*

Honors:
Summa Cum Laude May 2025
Eagle Scout, Boy Scouts of America May 2021

SKILLS

Programming Languages: Java, Python, C#, SQL, JavaScript, HTML, CSS
Tools & Environments: Git/GitHub, MySQL, Linux, Visual Studio, VS Code, Microsoft Office Suite
Languages: English (Native), German (Intermediate)

PROFESSIONAL EXPERIENCE

Digital Technology Intern
JLG Industries, *McConnellsburg, PA* May 2023 – May 2025

- Developed Python programs to retrieve and process large JSON datasets from a third-party VOIP RESTful API, applying validation and filtering to eliminate invalid or duplicate records.
- Designed and maintained modular, object-oriented code for reusable data-processing pipelines and automated refresh cycles, following the full software development lifecycle.
- Transformed raw call-center data into structured, actionable key performance indicators (e.g., wait times, service levels, agent performance) for analytics and dashboard reporting.
- Built interactive dashboards using Python and front-end technologies (HTML, JavaScript, CSS) to visualize daily, weekly, and monthly performance trends.
- Authored comprehensive technical documentation outlining metric definitions, data sources, and calculation logic for supervisors and analysts.
- Collaborated with supervisors and analysts to verify data integrity, resolve discrepancies in vendor-provided information, and identify key performance indicators to display.

RESEARCH

Enhancing Neural Machine Translation with Synthetic Parallel Corpora
Shippensburg University, *Shippensburg, PA* January 2024 – December 2024

- Engineered Python tools to preprocess, clean, and normalize bilingual text corpora, enhancing data quality for neural translation models.
- Built a scalable synthetic data generation system using back-translation, creating pseudo-parallel datasets at multiple quality thresholds for low-resource language support.
- Configured and maintained neural translation pipelines in Python using OpenNMT, incorporating subword tokenization, vocabulary generation, and YAML-based experiment management.
- Implemented statistical testing modules (ANOVA, Shapiro-Wilk, Tukey HSD) in Python to evaluate and validate model accuracy improvements.
- Developed automated visualization and reporting tools with matplotlib and pandas to track BLEU scores and benchmark model performance.