Henry Lee

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Education

Purdue University | ***West Lafayette, IN*** GPA: 3.5/4.0

Bachelor of Science, Major in Computer Science, Minor in Mathematics *August 2023 – Now*

Relevant Coursework

- **Completed Coursework:** Objected-Oriented Programming, Multivariate Calculus, Discrete Mathematics, Programming in C, Python Programming, Linear Algebra, Computer Architecture
- **Current Coursework:** Data Structures and Algorithms, Statistics for Data Science

Projects

Ticket | *Python, ConnectWise API, Machine Learning, Git, GitHub* April 2025 - Now

- Developed a machine learning system to classify sub-sections of a ticket
- Cleaned a dataset of over 300,000+ tickets to eliminate non-useful tickets in a supervised environment
- Trained the data to classify which tickets should be identified in a specific category

Virtual Reality Cave Simulation | *Unity Engine, LiDAR, Surface Reconstruction* January 2025 – Now

- Worked with the Unity Engine to develop a cave simulation for hosting educational purposes
- Utilized a process that transform a 10,000,000 point cloud into a smooth 3D structure
- Researched and compared various surface reconstruction methods to optimize processing time
- Adapted working in three-dimensional space to examine how to host an educational space for the geosciences

Financial Data Converter | *Python, Tkinter, User-Interface, Excel, PyCharm* September 2024 - March 2025

- Worked with Echopath LLC to develop a financial dashboard that displays financial trends
- Utilized Python to organize and structure financial information and framed it into a data framework
- Researched various methodologies to handle the information properly on a CSV file and to display them visually
- Developed a graphical user interface to allow a user to append new data with both CSV files and Excel files

Experience

Software Engineering Intern October 2024 – Now

Echopath LLC *Indianapolis, IN*

- Collaborated remotely with a software engineer on various development projects to enhance productivity
- Developed Python-based data processing solutions to structure, analyze, and visualize financial records
- Researched and implemented best practices for managing and maintaining a GitHub repository
- Contributed to software solutions that optimized workflows and improved data organization for the company

Undergraduate Software Engineering Researcher August 2024 – December 2024

Purdue University: The Data Mine *West Lafayette, IN*

- Collaborated with Concrete Engine to develop a console program for high-performance computing and AI
- Designed a customer data model using MongoDB and JavaScript to optimize database interactions
- Researched key features such as user authentication and efficient large-file transfers to Google Cloud Storage
- Collaborated in an Agile development environment, iterating on features and delivering consistent improvements

Undergraduate Data Science Researcher January 2024 – May 2024

Purdue University: The Data Mine *West Lafayette, IN*

- Collaborated with Wikimedia Deutschland to find mismatches between Wikimedia and other external sources
- Reported 900+ data mismatches with Python and SPARQL by checking Wikidata's data against external sources
- Utilized Rest APIs to access individual data values to compare different numerical attributes
- Documented disparities between Wikidata and other sources to feed the Wikidata Mismatch Finder

Technical Skills

Languages: Java, Python, C/C++, JavaScript, HTML/CSS, R, Rust
Frameworks: React, Node.js, Next.js, JUnit, Bootstrap
Developer Tools: Git, Visual Studio Code, PyCharm, IntelliJ, Eclipse
Databases: MySQL, MongoDB
Libraries: pandas, NumPy, Matplotlib