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

Virtual Reality Cave Simulation | *C#, Unity Engine, LiDAR* January 2025 – Now

- Worked in the Unity Engine to develop a cave simulation for hosting educational purposes
- Designed a process that interpolates white space in LiDAR data to smoothen out the unfilled space
- Created a virtual reality world that allowed students to view Indiana's cave formations
- Adapted working in three-dimensional space to examine how to host an educational space for the geosciences

Beanie Clock Web Extension | *HTML, CSS, JavaScript, Bootstrap, Git, GitHub* December 2024 - January 2025

- Developed a customized Pomodoro timer that rotates between study and rest sessions
- Implemented settings management to configure session durations and customize the interval for long breaks
- Integrated a stats feature to monitor and display the number of work sessions, short breaks, and long breaks
- Enhanced user experience by providing real-time session updates and intuitive navigation

Tickets@Purdue | *Java, Swing, JUnit, Git, GitHub* October 2023 – December 2023

- Constructed a ticket-sharing marketplace where Purdue students can buy and sell tickets to sports games
- Employed IntelliJ with Java to develop features like networking, graphical user interfaces, and concurrency
- Created software to authenticate the user logging into the program and wrote test cases for the project
- Designed the graphical user interface to make it user-friendly for the user to interact with the program

Experience

Software Engineering Intern October 2024 – Now

Echopath LLC *Indianapolis, IN*

- Worked with Echopath LLC to develop a financial dashboard that displays important trends from financial records
- 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 an application to allow a user to append new data from an input file via line commands

Undergraduate Data Science Researcher August 2024 – December 2024

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

- Collaborated with Concrete Engine to develop a customer console program for high-power computing and AI
- Utilized MongoDB to develop a customer model for Concrete Engine's databases in JavaScript
- Researched various features to implement such as authentication and sending large files to Google Cloud Storage
- Worked in an Agile environment, completing multiple development tasks throughout the project

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
Frameworks: React, Node.js, Next.js, JUnit, Bootstrap
Developer Tools: Git, Visual Studio Code, PyCharm, IntelliJ, Eclipse
Libraries: pandas, NumPy, Matplotlib