Henry Lee

□ 317-809-5546 | ► lee4602@purdue.edu | in linkedin.com/in/lofitea | • github.com/LofiTea | • lofitea-portfolio.vercel.app

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

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

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

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

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

Frameworks: React, Node.js, Next.js, JUnit, Bootstrap

Developer Tools: Git, Visual Studio Code, PyCharm, IntelliJ, Eclipse

Databases: MySQL, MongoDB Libraries: pandas, NumPy, Matplotlib