Yeon Lee

+1 678 644 3180 | @ ylee726@gatech.edu | LinkedIn | GitHub | Portfolio

EDUCATION

Georgia Institute of Technology   Atlanta, Georgia
B.Sc. in Computer Science; GPA: 3.78/4.00   *Aug 2020 – May 2024*
Threads in Intelligence and Devices

Relevant coursework: Object Oriented Programming, Data Structures and Algorithms, Objects and Design, Computer Organization & Program, Systems and Networks, Computer Networking I, Design & Analysis of Algorithms, Intro to Artificial Intelligence, Digital Design Lab, Prototyping Intelligent Devices, Automata and Complexity, Computer Vision, Game AI, Combinatorics

SKILLS

Languages: Python, Java, C/C++, HTML/CSS, Javascript, SQL, Swift, MATLAB, Bash, Go, NoSQL

Technologies: Flask, Django, Node.js, React.js, MongoDB, Git, Docker, AWS, Oracle Cloud, PyTorch, Anaconda, TensorFlow, Linux, Kali Linux, Apache, RESTful API, Jira

Methodologies: Agile, Scrum, OOP, Functional Programming, CI/CD, TDD

EXPERIENCE

Techrupt Innovations   Remote
Software Developer   *December 2024 – Present, Contract*

- Collaborated with a team to build a startup from the ground up, focusing on creating multiple AI agents to trade securities.
- Improved accuracy of a random forest regression model that aims to accurately estimate momentum of a security by 0.5% and decreased processing time significantly.
- Conducted thorough research and analysis to optimize trading strategies and ensure compliance with financial regulations.
- Worked under a Non-Disclosure Agreement (NDA) to protect sensitive financial and proprietary information.

LymphaTech   Atlanta, Georgia
Backend Developer   *Aug 2023 – May 2024, Contract*

- Developed a two-stage communication protocol between the UI and server to enable seamless access across multiple devices, implementing a flag system to efficiently manage data synchronization and resource usage.
- Fine-tuned parameters using PyTorch to enhance the balance between contour point distances and ground truth, achieving a maximum of 4% deviation from actual measurements and ensuring high accuracy.
- Collaborated with stakeholders to gather feedback, leading to actionable insights that improved user satisfaction and project alignment in subsequent iterations.
- Utilized computer vision principles and Python's Open3D point cloud library to generate contour points between landmarks, ensuring precise measurements.
- Led bi-weekly sprint meetings as SCRUM Master, facilitating Agile development cycles and effectively tracking progress with Jira.

College of Computing, Georgia Institute of Technology   Atlanta, Georgia
Computer Science Tutor   *Aug 2022 – May 2023, Part-time*

- Evaluated students' understanding of fundamental data structures and algorithms through assessments, feedback, and guidance during review sessions and office hours.
- Debugged complex coding issues in students' projects, providing hands-on demonstrations of problem-solving techniques and fostering a deeper understanding of software engineering principles, such as modular design, algorithm optimization, and code efficiency.

Projects

AmpyFin Trading Bot | *GitHub*

- An open source Python-based trading bot running on Oracle Cloud, designed to trade securities within the NASDAQ-100 holdings. It uses supervised ensemble learning and multithreading to dynamically rank and weigh 132 trading indicators daily, optimizing profitability in real-time. Leveraging tools like pandas, motor, and scikit-learn, the bot achieved a 31.26% annual return over 24 years of backtesting with a Sharpe ratio of 2.18 and Sortino ratio of 1.3.

NyxHub | *GitHub*

- NyxHub is a secure web file sharing application designed to facilitate safe and efficient file transfers. It utilizes React for the frontend, MongoDB for the database, and Flask for API support. NyxHub supports various file types such as media, PDFs, Word documents, text files, and images. Users can sign up, login, and share files with peers by communicating usernames. Files sent will be available for the recipient upon their next login. NyxHub also allows users to store files for personal use, ensuring they are accessible whenever needed. The platform emphasizes security and convenience, providing audit logs, user management, and integration with other tools.

LeetCode Twitter | *GitHub*

- A fun and functional social media platform inspired by a LeetCode system design problem. It brings the solution from the coding challenge to life, featuring core functionalities like login/ signup, posting tweets, following/unfollowing users, and viewing a personalized news feed. Built using React, MongoDB, JSON Web Tokens, CORS, and FastAPI, the project leverages web development and security principles to create a lightweight, interactive application.

Jin Slackbot | *GitHub*

- A feature-rich Slackbot designed to streamline workflows and enhance productivity by integrating seamlessly with MongoDB. It supports a variety of commands, including message management, database interactions, notifications, and data insights, making it a powerful tool for both individual users and teams. Built using Python and leveraging Slack's API, Jin offers functionalities such as querying and updating MongoDB data, setting reminders, and even creating polls or visualizing data. The result is an efficient and customizable assistant tailored to simplify your Slack workspace experience.

MiniDog | *GitHub*

- An innovative robot designed for cost-effective and efficient luggage transportation. It uses a Raspberry Pi and a proximity sensor to calculate the speed of a moving hand and adjust its pace to maintain a consistent distance. The control system, based on Arduino, includes a wireless remote controller as a backup. This project won 1st place at the CS 3651 robotics showcase by demonstrating its basic functionality smoothly.

Awards & Achievements

Faculty Honors Letters: Awarded to degree-seeking undergraduate who during the preceding term made an academic average of 4.00 at the Georgia Institute of Technology. (Spring 2022, Fall 2023)

1st/34 in Fall 2023 CS 3651 Robotics Showcase: Awarded to the team who placed in the CS 3651 robotics showcase based on criteria of creativity, complexity, and implementation. (Aug 2023 − Dec 2023)

25th/253 in 2019 Georgia Tech High School Math Day Proof Exam: Prerequisite for entrance into the competition was to place in the top 20% in the competitive exam in the state level. Award was given to students who placed in the top 5 of the proof exam with further placements being notified through individual schools after High School Math Day (April 2019)