# Yeon Lee

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## EDUCATION

**Georgia Institute of Technology**                                      Atlanta, Georgia
*B.Sc. in Computer Science*                                          *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

**Attachments King**                                                          On-site
*Software Engineer - AI Schema*                                    *Feb 2025 – Present. Full-time*

- Engineered company-wide cursor rules for AI-driven rule generation, resolving inconsistent rule authoring processes and resulting in streamlined, standardized rule creation.
- Built a robust testing framework to safeguard codebase integrity during large-scale refactors, resolving regression risks and resulting in accelerated, reliable development cycles.
- Architected a scalable ETL pipeline ingesting PDFs, CSVs, and HTML vehicle documents, externalizing transformation logic into YAML and populating an AWS Neptune graph database, resolving tight coupling to vehicle types and resulting in automated, type-agnostic node-and-edge generation.
- Conducted in-depth frontend and backend audits to uncover pain points and security vulnerabilities, resolving critical UX and security gaps and resulting in a mathematically formalized vehicle schema that ensures consistent data integrity.

**Techrupt Innovations**                                                       Remote
*Software Developer*                                             *Dec 2024 – Feb 2025, Contract*

- Collaborated with the team during weekends to build a startup from the ground up, focusing on creating multiple AI agents to trade securities.
- Improved accuracy of the training 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.

## PROJECTS

**AmpyFin Trading System** | *GitHub*

- Leveraging high-fidelity market data from Databento, AmpyFin operates across 6 Oracle Cloud clusters to drive automated NASDAQ-100 trading strategies. We're in advanced discussions with a Y Combinator–affiliated subsidiary to integrate next-tier execution APIs. Optional Dockerized deployments ensure environment consistency and rapid client onboarding, supported by a dedicated team of four developers. A proprietary backtesting library underpins seven production ensemble models—an eighth is in active development, enabling a layered ensemble learning architecture across all models. This design delivers institutional-grade risk management and reproducible, data-driven insights. Since going live, both open-source and proprietary versions have consistently outperformed the market—year-to-date returns exceed 30%, beating benchmarks and attracting partnership inquiries from multiple hedge funds, trading firms, and one major software company.

**NyxHub** | *GitHub*

- 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 unique 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/ sign-up, posting tweets, following/unfollowing users, and viewing a personalized news feed in accordance to the problem description. 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)

**1$^{st}$/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)

**25$^{th}$/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)