Yeon Lee

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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, GraphQL

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

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

Experience

LymphaTech — Atlanta, Georgia

Backend Developer — *Aug 2023 – May 2024, Contract*

- Engineered a two-way communication system between the UI and server components by integrating two communication types through a single MongoDB database, implementing a flag system for resource efficiency.
- 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

Undergraduate Teaching Assistant — *May 2022 – May 2023, Part-time*

- Evaluated students' understanding of fundamental data structures and algorithms through assessments, feedback, and guidance during recitation sessions and office hours.
- Contributed to the development of a scalable cheat detection assistance application to maintain academic integrity.

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: Prerequsite for the competition was to place in the top 20% in the competitive exam. Award was given to students who placed in the top 5 of the proof exam with further placements being notified to individual schools after High School Math Day (April 2019)

Projects

AmpyFin Mean Reversion & Momentum Trading Bot | *GitHub*

- Developed a Python-based algorithmic trading bot using the Pandas library, Alpaca, MongoDB, YFinance, and Polygon API, serving as a foundational resource for newcomers to algorithmic investing. Achieved a 31.26% average annual return over 14 years, with real-time trading yielding an average monthly return of 21% during fiscal year 2020. The bot was optimized with a Sharpe ratio of 0.86, Sortino ratio of 1.3, and RoMaD of 0.55, providing valuable insights for those looking to explore investment strategies.

Jin - An Efficient Slackbot | *GitHub*

- Jin is a versatile Slackbot designed to enhance your Slack experience by seamlessly integrating with MongoDB. It helps you manage and interact with your data, automate tasks, and streamline your workflow. Jin uses the Slack API to read and write to channels, ngrok to reroute traffic to a specific port, MongoDB to store chat history, and Flask for handling various functionalities. With Jin, you can effortlessly maintain productivity and efficiency within your Slack workspace.

SafeSportsBets | *GitHub*

- An online platform that offers simulated sports betting using virtual currency, providing a safe environment to experience the thrill of betting without real money risks. It uses React for the frontend, MongoDB for the database, Render to host the website, and RapidAPI for sports odds, results, and scores. The platform promotes responsible gambling habits and educates users on the dangers of sports betting addiction, featuring user registration, league creation, and educational resources. Additionally, a CI/CD pipeline automates the development and deployment process, ensuring smooth operation and updates.

Big Dog | *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.