Lawrence Lim

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EDUCATION

New York University Expected Completion: Sep 2021 - May 2025

Bachelor's Degree, Computer Science Major *Shanghai, China*

- Cumulative GPA - 3.83/4.00; Major GPA - 3.85/4.00

SJTU-THU-PKU Summer Program July 2023

Bachelor's Degree, Computer Science Major *Shanghai, China*

- Course List: Cryptography and Blockchain, Artificial Intelligence

WORK EXPERIENCE

Software Engineer Intern Mar 2023 - Present

Knn3 – User-centric DataFi solution for d/Apps and smart contracts *(Remote) Singapore*

- Prototyped and researched Natural Language (NL) to SQL conversion methods leveraging LLM prompt chaining
- Built testing benchmark to evaluate the accuracy, speed, and cost of methods for generating SQL from NL
- Significantly improved benchmark performance by leveraging sentence transformers, Redis Cosine similarity search
- Containerized application with Docker, automated building, testing, and deployment to AWS with Jenkins CI/CD

Technology Consultant Intern Sep 2022 - May 2023

Jika.io – Social community platform built for investors *(Remote) Tel Aviv, Isreal*

- Constructed MongoDB to Google Bigquery data pipeline. Enabled data analysis and visualization with SQL
- Played primary role in designing relational schema and orchestrating each step of the ETL process

Blockchain Research Analyst May 2022 - Sep 2022

TokenInsight *Shanghai, China*

- Research topics include zero-knowledge-proof rollups, optimistic rollups, and Ethereum's development timeline.
- Wrote technical articles on various blockchain protocols and architecture. Also researched blockchain valuation and risk assessment. Served as core member of TokenInsight's research team.

PROJECTS

Airline Booking System – Full Stack Python Flask Application View Project

- Leveraged Flask, MySQL database, and Bootstrap CSS to create an airline booking system inspired by Expedia.com
- Utilizes functions such as session tokens, user password hashing, and SQL triggers. Deployed on Railway.app

Decentralized Crowd Funding – Full Stack Solidity and JavaScript d/App View Project

- Full stack Ethereum crowd funding app with Solidity and Hardhat for backend, and HTML/CSS/JS for frontend.
- Uses Chainlink Price Feeds for off-chain data with MetaMask and Ethereum Provider API for user payments.

MeChat – Python GUI Desktop Chat App View Project

- Utilizes web sockets for communication, end-to-end RSI encryption for security, and client-side multi-threading.
- Uses Tkinter Python library used for the GUI. Project currently used as a showcase in Intro to Comp. Sci class

RESEARCH

Packet Trace Anonymization Dec 2022 - May 2023

NYU Shanghai Computer Science Department - Advised by Prof. Guyue (Grace) Liu *Shanghai, China*

- Built, modified, and tested network packet anonymization tools. Analyzed and compared their TCP/IP anonymization policies by conducting literature review, analyzing source code, and reading documentation.
- Using methodologies from tcpdpriv, tcpmkpub, and tcpdpriv to develop new secure packet anonymizer in C.

Crypto Asset Rating Methodology Framework   May 2022 - Jan 2023
Dean's Undergraduate Research Fund - Advised by Prof. Jiding Zhang   *Shanghai, China*

- Investigated how crypto rating methodologies can be improved through a holistic overview of the project, conducting data analysis on off chain metrics and on chain data to derive a performance rating, and using smart contract code auditing to determine a security rating.
- Developed smart contract applications and wrote tests with code coverage as a part of understanding full stack smart contract development and security practices.

LEADERSHIP POSITIONS

President   May 2022 - May 2023
Undergraduate Business Association (UBA) @ NYU Shanghai   *Shanghai, China*

- Managed a club of 80+ members that held workshop, speaker series, and mentorship events on a weekly basis.
- Hosted inaugural UBA Spring Business Competition with data analysis, investing, and marketing tracks
- Our organization's impact on campus was recognized with the "Trailblazer" award, given to the most innovative and pioneering student organization in NYU Shanghai.

Orientation Ambassador Captain   Mar 2022 - Sep 2022
New Student Programs @ NYU Shanghai   *Shanghai, China*

- Led a team of eight Orientation Ambassadors over four months to plan and host a Game Night during Freshmen Orientation Week, one of the four major OA organized events.
- Primarily delegated tasks, managed budget, and coordinated with Student Life staff to achieve a successful event.

Class of 2025 President   Sep 2021 - May 2022
Student Government @ NYU Shanghai   *Shanghai, China*

- Led the organization and planning of NYU Shanghai's week-long Spirit Week event and received over 100+ registered participants on kick-off day.
- Worked with the Class Engagement Board to plan and host a week of online events to support NYU Shanghai students during the 2022 Shanghai Lockdown.
- Served as the voice of my class and aggregated questions and concerns from the student body, and presented them, in the form of a report, at weekly student government meetings.

TECHNICAL SKILLS

Programming Languages: Python (fluent), SQL (fluent), HTML/CSS (proficient), Solidity (proficient), C (prior experience), Javascript (prior experience), Shell (proficient), Lua (prior experience)
Frameworks and Libraries: FastAPI, LangChain, Pytest, Flask, Hardhat, Pandas, Matplotlib, Numpy
Developer Tools: Git and Github, Docker, Jenkins, Debian Linux, venv/Poetry, Vim, Vscode
Cloud/Databases: MySQL, Redis, Redis Stack Server, Google Cloud BigQuery
Coursework: Databases, Computer Architecture, Data Structures, Discrete Math, Linear Algebra

HONORS AND AWARDS

- **Leadership in Action**: Outstanding individual leadership in NYUSH student organizations   April 2023
- **Recognition Award**: Excellent academic performance and contributions to the NYUSH community   July 2022

HOBBIES AND INTERESTS

- **Leadership in Action**: Outstanding individual leadership in NYUSH student organizations   April 2023
- **Recognition Award**: Excellent academic performance and contributions to the NYUSH community   July 2022
- **Areas of Interest**: Blockchain Development, Zero Knowledge Proof Applications, Backend Web Development