# Lawrence Lim

+1 (551) 229 5627 · ll4715@nyu.edu · New York, NY

Homepage: lawrencelim.xyz · Github: larry-lime · LinkedIn: lawrence-rx-lim

#### **EDUCATION**

## New York University

Bachelor's Degree, Computer Science Major

Expected Completion: May 2025

New York, NY

- Cumulative GPA 3.8/4.0; Major GPA 3.9/4.0
- Coursework: Cryptocurrencies & Decentralized Ledgers (Graduate), DevOps & Agile Methodologies (Graduate), Algorithms, Databases, Computer Architecture, Data Structures, Discrete Math, Linear Algebra, Calculus III
- Honors & Awards: Leadership in Action Award (2023), Student Organization Trailblazer Award (2023), Recognition Award (2022), Dean's Undergraduate Research Fund Recipient (2022), Dean's Honor List (2021 2023)

## WORK EXPERIENCE

## Software Engineer Intern

May 2023 - Aug 2023

Knn3 Network – User-centric data provider for decentralized apps and smart contracts

Singapore

- Developed LLM chat API with features such as interactive web search, web scraping, and document retrieval
- Built FastAPI backend with MySQL database, SQLAlchemy ORM, and Pinecone for document similarity search
- Implemented web scraping with BeautifulSoup and Selenium, and chat message history caching with Redis
- Wrote unit tests with Pytest achieving 95% code coverage, and documented API with Swagger and mkdocs
- Containerized microservice with Docker, automated building and deployment to Amazon EKS with Jenkins CI/CD

## Data Engineer Intern

Feb 2023 - May 2023

Jika.io – Social community platform built for investors

Tel Aviv, Israel

- Tripled data analyst work efficiency by constructing MongoDB to Google BigQuery data pipeline with BI frontend
- Architected relational database, employing third normal form for optimal schema design and query efficiency.
- Analyzed NoSQL database schema and wrote SQL scripts to clean, transform, and insert data into relational tables

## **PROJECTS**

## NYU Blockchain & Fintech Poker - Secure Trustless Online Poker View Project

- Developed game initiation (buy-in, blinds) and action (check/bet/fold) verification on EVM smart contracts
- Implemented Mental Poker cryptography protocol to enable trustless and provably secure shuffling and dealing
- Utilized state channels to minimize on-chain transactions and gas fees, while maintaining game integrity
- Employed Python web socket server and test client to facilitate state channel communication between players
- Leveraged crypto primitives such as RSA signatures, verifiable randomness, and commutative encryption

## HealthFirstAI Prototype – AI-Powered Health and Fitness Coach View Project

- Built personal coach chatbot that provides health and fitness advice to users based on their goals and profile
- Developed user profile and goal tracking system with PostgreSQL, and chatbot with LangChain, and FastAPI
- Designed personalized food recommendation algorithm comparing nutrition vector cosine similarity and distance

## LEADERSHIP & ORGANIZATIONS

• Development Team, NYU Blockchain and Fintech

Oct 2023 - Present

• CEO & Founder, HealthFirstAI - AI-Powered Personal Coaching

Jul 2023 - Present

• President, Undergraduate Business Association @ NYU Shanghai

Sep 2022 - June 2023

• Co-Director of Tech Consulting, TAMID (Tech Track) @ NYU Shanghai

Feb 2023 - May 2023

#### TECHNICAL SKILLS AND INTERESTS

Programming Languages: Python, SQL, C, HTML/CSS, JavaScript, Solidity, Java, Shell, Lua, Microsoft Office Libraries/Frameworks: FastAPI, Flask, SQLAlchemy, Pandas, NumPy, LangChain, Bootstrap, Node.js, Hardhat Cloud/Databases: PostgreSQL, MySQL, Redis, Pinecone, Google Cloud BigQuery, Amazon EKS, Elastic Search Developer Tools: Git, GitHub, Docker, Linux, Kubernetes, Jenkins, Terraform, VMware, UTM, Github Actions Areas of Interest: Blockchain, Cryptography, Artificial Intelligence, Backend Web Development