

Le Thanh Long

Leetcode

Email : attentionocr@gmail.com

Mobile : +84 969973012

EDUCATION

- **Hanoi University of Science and Technology**

Hanoi, VN

Bachelor of Computer Science; CPA: 3.65

Sep. 2020 – Aug. 2024

EXPERIENCE

- **B4E - BKC Labs**

Blockchain Labs, VN

Software Engineer Intern

Feb 2022 - Apr 2023

- **Team:** Collaborated with a team of four to design and implement a digital system for **automating diploma issuance and authenticating** digital certificates.
- **Key Functions:** Implemented key functions including **automatic certificate generation** with QR codes using certificate templates and data. Developed support for **remote sign authentication of PDF certificates** for organizations, automated email distribution, and **integrated blockchain technology for storage and authentication** of certificates.
- **Time Optimization:** **Revamped the storage and retrieval of approximately 150GB** of graduate degrees as local files by utilizing **Google Cloud Storage** and **Elasticsearch** for **enhanced efficiency and scalability**. **Reduced** certification **processing time by 99%** and **cut costs per certificate by 25x** through digitization of signing and **batch processing** optimization.
- **Cost Optimization:** **Reduced the cost** of storing certificates on the blockchain by employing a **Merkle tree data structure** and batch processing of hashes and test automated system functions using selenium.
- **PDF Generation Optimization:** Utilized **Optical Character Recognition (OCR)** to automate and streamline the process of entering information onto diploma templates, improving both precision and efficiency.
- **Skills:** NestJS, OOP, Data Structure and Algorithm, PDF Generator, Blockchain Interaction Services, Google Cloud Storage

- **DefiLens - Oraichain Labs**

Hanoi, VN

AI and Software Engineer

Apr 2023 - Present

- **Team:** Collaborated with a team of 8 to design and implement a system for **cryptocurrency market analysis**, providing users with **valuable trading insights**.
- **Key Functions:** Developed a system to calculate and update technical analysis for time series charts of **5,000 tokens, with a 1-minute update interval**. Build a **real-time generate report system** that integrates information about **charts, indicator data, token trends** and real-time interaction with the interface. Implemented chart visualization logic using the **KLineChart** library on the front end.
- **Algorithm:** Developed **optimal algorithms** for identifying **similar chart patterns and token patterns**. Created a primary trading module incorporating **67 real-time trading strategies**.
- **Optimize System:** **Enhanced system performance and decoupling** through the implementation of **Kafka queues**. Developed a technical analysis system for 5,000 tokens, **optimizing search efficiency** by flexibly integrating Elasticsearch, Redis, and databases.
- **Skills:** Realtime processing, System Design, Data Structure & Algorithm, Cache, Airflow, Elastic Search, FastAPI.

PROJECTS

- **BKPrice System - University**

Hanoi, VN

My Graduation Project

May 2023 - July 2024

- **Data Center:** Developed an **integrated system** for data collection and cleaning from **5 real estate sources** in Vietnam. Utilized **Airflow to schedule** data crawls and implemented queues to enhance the independence of data collection, cleaning, and storage services. Stored raw data in **Amazon S3** and **cleaned data in MongoDB**, using **caching to optimize collection and prevent duplication**.
- **Optimize Search Service:** Leveraged **Debezium to capture and index database changes** into Elasticsearch, **reducing latency and improving consistency** between the database and search engine. Implemented a **quadtree data structure** to exponentially **decrease search times** for real estate by location.

- **Optimize System:** Utilized Kafka for real-time updates of real estate data and Amazon S3 for scheduled storage. **Integrated with the Feast Framework** to manage property attributes, enhancing data reuse and scalability. Developed an **automated system to train and evaluate AI models** upon the addition of new real estate data in the database.
- **Skills:** System Design, Technical Stack in Data & AI Engineer, Data Structure & Algorithm, Amazon S3.
- **Tiki Recommendation System:** Suggest items based on **user history interaction using deep learning**.
- **BFashionverse:** Virtually try on clothes using **computer vision and image search for fashion product**.

PROGRAMMING SKILLS

- **Technologies:** NestJS, MongoDB & PostgreSQL, Airflow, Kafka, Debezium, Redis, Elastic Search, GC, S3
- **Languages:** Python, JS, C++, SQL & noSQL