

LÊ TRUNG SƠN

08491725XX | trungson.le@outlook.com | github.com/sonle1501 | sonle1501.github.io

Introduction

An Information Technology student with foundational knowledge in computer science and programming. Taking a balanced approach to AI in software development to solve problems and continuously expand knowledge in the era of LLMs.

Education

University of Science - VNUHCM (HCMUS)

Major: Information Technology

2020 – 2025

- GPA: 3.1 (7.3) - Good

Personal Projects

github-loc | Core Java ($\approx 2,000$ LOC)

GitHub | Docs

A command-line tool for counting Lines of Code (LOC) of GitHub repositories.

Unlike other tools on the market (such as ghloc or codetabs), this tool counts actual Source Lines of Code (SLOC) and processes multiple public repositories for a specified user.

- **Hierarchical Tree Structure:** Designed a custom tree data structure for directory storage and recursive traversal, supporting JSON export.
- **Batched Multithreading:** Achieved a 3x–6x speedup compared to sequential processing (benchmarked using JMH).
- **Testing & Release:** Mock testing with Mockito, released executable files for both Linux and Windows platforms using GitHub Actions.

film-db

GitHub | Video Demo | Docs

Java, Spring, PostgreSQL (40+ APIs | LOC: core backend $\approx 5k$ | total $\approx 20k$)

A modular monolith backend project supporting a web UI to explore movies, using the official non-commercial IMDb dataset.

- **Import Pipeline:** Imported millions of TSV rows into PostgreSQL; reformatted array data using functional interfaces to achieve polymorphism.
- **Database Optimization:** Implemented composite and GIN indexes; achieved zero-downtime schema updates using staging tables.
- **Search Engine Integration:** Built a custom scoring algorithm based on user queries, leveraging PostgreSQL built-in FTS features to optimize intent matching.
- **Inter-module Communication:** Utilized shared interfaces and the event-publisher pattern via Spring Events (both synchronous and asynchronous).
- **Spring Security & Authentication:** Implemented authentication using stateless JWT access and stateful refresh tokens to achieve persistent sessions.
- **Self-hosted Deployment:** Containerized services with Docker, configured routing and rate limiting via Nginx, and exposed the application to the internet using ngrok.
- **Frontend Integration:** Developed a Next.js frontend to deliver end-to-end feature flows.

Skills

Programming: Java, JavaScript, Spring Boot

Tools: Git and GitHub, Docker, Antigravity

Knowledge: OOP, Algorithms and Data Structures, Database, AI Foundation, English ($\approx$ B2)