

Lim Xin Yi

<https://xy-portfolio-gray.vercel.app>



+6016 3101 228



lim.xin.yi@student.mmu.edu.my



github.com/xinyi0227

Software Engineer specializing in scalable web architecture and artificial intelligence, with a proven track record of building data-intensive decentralized finance (DeFi) tools. Adept at designing three-tier microservice architectures that bridge responsive frontends (Next.js, Tailwind) and robust relational backends (Ruby on Rails, PostgreSQL) with isolated AI microservices (FastAPI). An ETHKL 2024 Web3 hackathon winner experienced in orchestrating multi-agent LLM pipelines and asynchronous data ingestion to safely process and visualize high-throughput on-chain metrics.

EDUCATION

Diploma in Information Technology	Multimedia University	Nov 2022 - Oct 2024
CGPA: 3.98/4.00 (Dean List for all semester)		
Bachelor of Computer Science (Honours) (Artificial Intelligence)	Multimedia University	Nov 2024 - Current
CGPA: 3.93/4.00 (Dean List for all semester)		

INTERNSHIP EXPERIENCE

Software Engineering Intern JurisTech	August 2024 – October 2024
- Database Optimization & Performance Tuning: Leveraged advanced PL/SQL techniques and batch processing to enhance system efficiency and manage high-volume data operations without performance degradation. - Scalable Backend Development: Engineered and optimized automated scripts to ensure data integrity and resolve architectural bottlenecks in monthly processing systems. - Full-Lifecycle Technical Problem Solving: Diagnosed complex technical issues and implemented standardized solutions within an Agile environment to improve the accuracy and reliability of financial enterprise software.	

HACKATHON PROJECT EXPERIENCE

AI Evaluator Platform Multi-Agent Judging & Evaluation System	Gold Winner at Inventx 2025
<i>React, Node.js, Python OCR, Multiple LLMs</i>	
- Architected a scalable, multi-tenant web platform to manage competition workflows, utilizing a responsive React frontend and a Node.js REST API to orchestrate event setups and dynamic ranking systems. - Engineered a decoupled Python data ingestion pipeline utilizing OCR for document preprocessing and strict rule-based filtering to validate submission eligibility prior to AI analysis. - Designed an automated multi-LLM ensemble scoring system, routing preprocessed submission data to specialized language models to generate objective, bias-free scorecards for human-in-the-loop review.	
EaSys Hybrid Business Analytics & Workflow Platform	Top 12 Winner at Future Ready Hackathon 2025
<i>React, Django, Node.js, PostgreSQL, Supabase, MCP</i>	
- Architected a hybrid web application for business analytics, building a responsive React frontend and a Django REST API to handle secure CRUD operations and PostgreSQL database management. - Resolved 30-second API timeouts by decoupling CPU-intensive AI tasks from the monolithic backend into an isolated, asynchronous Node.js microservice. - Engineered 12 custom MCP tools for automated cross-service monitoring and schema validation, successfully dropping API error rates to <2%. - Optimized overall system architecture to ensure the UI remained unblocked during heavy data processing, achieving a 90%+ improvement in API response times (dropping to 200-500ms).	

React, Solidity, FastAPI, Oasis Sapphire, Gemini AI

- Architected a privacy-preserving decentralized application (dApp) leveraging Oasis Sapphire's confidential EVM, writing Solidity smart contracts to securely process trader matching and automated payments.
 - Engineered an isolated AI matching microservice using Python and FastAPI, integrating Gemini to evaluate trading portfolios while keeping heavy computation decoupled from the blockchain layer.
 - Built a responsive web frontend utilizing React 19 and Ethers.js for seamless MetaMask wallet authentication, featuring real-time trading performance analytics visualized through Recharts.
 - Containerized the three-tier architecture (Smart Contracts, Python API, React UI) using Docker, deploying the backend within a Trusted Execution Environment (TEE) via Oasis ROFL to guarantee data privacy.
-

SELF PROJECT EXPERIENCE

CrediSphere-AI | Autonomous Financial Risk Intelligence Platform

Feb 2026

Tech Stack: Python, Streamlit, SQLAlchemy, Gemini 2.0

- Architected an end-to-end B2B credit underwriting system, decoupling AI logic modules (RAG, OCR, Fraud Detection) from the UI to ensure a maintainable and scalable codebase.
- Engineered a multi-modal data ingestion pipeline using Python and SQLAlchemy to extract, structure, and persist metrics from audited PDF statements into a relational SQLite database.
- Designed a deterministic fraud-detection algorithm that cross-validates parsed PDF financial data against raw CSV bank records to automatically flag reporting discrepancies.
- Built an interactive Streamlit dashboard featuring a context-aware RAG chatbot, dynamic Plotly financial spreading, and automated Graphviz risk architecture maps for human-in-the-loop review.

GeckoGuard-AI | Distributed DeFi Risk Intelligence Engine

Feb 2026

Tech Stack: Next.js, Ruby on Rails, PostgreSQL, Python (FastAPI), Gemini 2.5

- Engineered a three-tier web application to evaluate cryptocurrency assets, matching CoinGecko's production stack (Next.js, Rails, Postgres).
- Built a responsive frontend dashboard using Next.js and Tailwind CSS, featuring real-time data visualization of on-chain risk metrics via Recharts.
- Designed a Ruby on Rails API to orchestrate data flow and manage relational persistence in PostgreSQL, effectively mitigating the N+1 query problem.
- Decoupled heavy LLM token audits (Gemini 2.5) and high-throughput CoinGecko API ingestion into a separate asynchronous Python microservice to prevent main-thread blocking.

AURA | Autonomous AI Business Intelligence Platform

Jan 2026

Tech Stack: Python, Streamlit, PostgreSQL, Pandas, DeepSeek & Gemini APIs

- Architected an advanced "Agent & Skills" design pattern, strictly decoupling cognitive LLM reasoning from deterministic Python execution to guarantee zero mathematical hallucinations during analysis.
 - Engineered a dynamic data ingestion pipeline using SQLAlchemy and Dockerized PostgreSQL, featuring an interactive "AI Data Janitor" that utilizes Pandas for autonomous schema cleaning and imputation.
 - Built a responsive, human-in-the-loop frontend using Streamlit, integrating a custom multi-model LLM router to generate dynamic Plotly visualizations and export board-ready PDF reports.
-

PROFESSIONAL CERTIFICATES

- Huawei Certified ICT Associate – Artificial Intelligence (HCIA-AI)
- AWS Certified AI Practitioner
- AWS Certified Cloud Practitioner
- Google Analytics Certification