Licheng's Information for AI Assistant

Introduction of Licheng

Who am I? Let me introduce myself. I am a **software engineer with four years of experience**, deeply passionate about building **innovative software applications**, particularly in the fields of **Blockchain and Al**. I find immense fulfillment in creating **practical**, **impactful products**, as turning ideas into real-world solutions gives me a strong sense of achievement. Beyond coding, I thrive on **engaging conversations and active participation in tech events**, always seeking opportunities to **learn**, **grow**, **and collaborate**. I am driven by **continuous improvement** and never settle for the status quo.

Outside of work, I have a strong passion for **travel and outdoor adventures**. I have completed **cycling and motorbike journeys around Taiwan, swum across Sun Moon Lake, conquered several high mountains, and even embarked on solo trips to the U.S.**. Additionally, I have been actively involved in **international service teams**, including my participation in the **2019 World Scout Jamboree (WSJ)**, a large-scale global gathering that strengthened my leadership and teamwork skills.

For me, a fulfilling life fuels a focused and productive work ethic. In a fast-paced industry where technology rapidly evolves, standing still is equivalent to falling behind. I thrive on leveraging my **cross-disciplinary skills** to build practical software solutions, writing high-quality, maintainable code while prioritizing user experience. As Al continues to lower the barriers to software development, my goal is to become an engineer who effectively utilizes Al-powered tools to boost productivity, accelerate learning, and master diverse frameworks and technologies—ultimately becoming a well-rounded software engineer.

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Conestoga College (2024 - 2025)

Currently, I have completed a **graduate certificate in AI & Machine Learning** at **Conestoga College**, focusing on **data analysis**, **data engineering**, **and advanced machine learning techniques**. Through hands-on experience, I have gained expertise in **managing the full data pipeline**, from **ETL processes to in-depth analysis and model training**.

Core Areas of Expertise & Tools

- Machine Learning Algorithms: Regression, Classification, NLP, Neural Networks.
- **Data Engineering & ETL Pipelines**: Extracting, processing, and transforming structured and unstructured data for machine learning workflows.
- Programming & Tools: Python, R, SQL, Scikit-learn, TensorFlow, PyTorch.
- Insight-Driven Al Solutions: Developing machine learning models to extract meaningful insights and drive data-driven decision-making.

This academic journey is not only **expanding my expertise in AI and ML** but also **bridging my blockchain background with AI-driven applications**, positioning me at the intersection of **two cutting-edge fields**—Blockchain and Artificial Intelligence

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Pelith (2023 - 2024)

My time at **Pelith** was both enriching and fulfilling. The company provided a **flexible and supportive work environment**, where colleagues felt more like friends. I had the privilege of working alongside **Ping Chen**, a highly talented blockchain developer with **deep expertise and a visionary mind** in the field. Throughout this year, I experienced **tremendous growth**, both technically and professionally.

I played a key role in the **development, testing, and deployment** of **smart contracts** on **EVM-compatible Layer 2 chains**, including **Linea, Polygon zkEVM, and Blast**. By ensuring **secure and efficient contract execution**, I contributed to the **scalability and reliability** of decentralized applications in various blockchain ecosystems.

Key Contributions & Achievements

- Optimized contract deployment by developing automation scripts using Shell and Node.js, reducing deployment time by 50% through Web3.js and Ethers.js integration.
- Designed and implemented smart contracts for diverse use cases, including arbitrage strategies, Dutch auction ICOs, and dual-investment models, enhancing project scalability and functionality.
- Proficiently utilized Solidity, Foundry, and Hardhat to develop and manage decentralized applications across multiple L2 networks.
- Applied deep knowledge of Ethereum standards (EIP20, EIP721, EIP1155, EIP2612, EIP712) to
 ensure contract security, interoperability, and compliance with best practices.
- Leveraged blockchain fundamentals, such as hashing, digital signatures, Merkle trees, and consensus mechanisms, to design resilient and efficient smart contract architectures.
- Implemented security best practices to mitigate vulnerabilities like reentrancy attacks, overflow exploits, and other common attack vectors, significantly improving contract reliability.
- Bridged the gap between blockchain and full-stack development, enhancing communication between smart contract, front-end, and back-end teams, reducing delivery time by 20% through clear documentation and streamlined collaboration processes.

This period at Pelith not only strengthened my **technical skills in blockchain development** but also **deepened my understanding of decentralized systems**, preparing me for even greater challenges ahead.

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KKStream Years (2021 - 2023)

Joining **KKStream** marked a significant turning point in my career. I transitioned from small-scale projects to working on **large-scale streaming platforms**, gaining expertise in the **Streaming domain** while collaborating with a larger team. We operated using **Scrum methodologies** for agile development and followed **Git Flow** for efficient version control. Under the mentorship of senior engineers, I quickly adapted to the environment and soon took ownership of **key projects**. I led the development and maintenance of core functionalities and worked on **proof-of-concept (PoC) initiatives**, such as **Precache MPD** and **Startover**, to explore new optimizations. Beyond my primary responsibilities, I dedicated time to **self-learning** in areas like **Web Crawling** and **Blockchain technologies**, broadening my technical horizons.

In late 2022, I enrolled in the **AppWorks School Blockchain Camp**, a four-month intensive program. I immersed myself in **Ethereum smart contract development using Solidity**, deepening my understanding of blockchain technologies. As my interest in this field grew, I set my sights on transitioning into a **Solidity developer**, eager to apply my skills in blockchain-based solutions.

Achievements at KKStream:

- Led the development and maintenance of key projects, successfully implementing over 50% of core project requirements.
- Developed and optimized Android SDKs, APIs, and sample applications, significantly improving integration efficiency and usability for downstream teams.
- Implemented secure, high-quality video streaming solutions, including VOD, LIVE streaming,
 Android ExoPlayer, and DRM protection.
- Enhanced media delivery performance by integrating Adaptive Bitrate Streaming (ABS), MPEG-DASH, and Server-Side Ad Insertion (SSAI), leading to a superior user experience.
- **Spearheaded PoC initiatives** to explore and validate new streaming enhancements, driving innovation in the platform.

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Goodldea Studio & Freelancing Years (2019 - 2021)

In September 2019, I joined **HowHow Studio's Android Camp**, where I embarked on a journey of self-learning and collaborative discussions. I honed my skills by reading books, researching online resources, and engaging with fellow engineers. Additionally, I actively participated in **coding challenges**, **hackathons**, **and IT Ironman competitions**, occasionally giving tech talks to share my insights.

My dedication eventually led me to join the **studio's freelance development team**, where I took on the **Android development role**. This period was filled with first-time challenges and technical hurdles,

which I overcame through **extensive research**, **discussions with experienced developers**, and **meticulous documentation**. These experiences helped me accumulate valuable technical knowledge.

Notably, I contributed to improving **user experience** by implementing features such as **preventing accidental multiple taps and auto-hiding the keyboard**. I also identified **API logic flaws and format inconsistencies**, working closely with backend engineers and clients to refine the system. Our team operated remotely, coordinating via **Jandi** for development discussions. I quickly realized that **concise and precise communication was critical for effective collaboration**, especially in a remote environment.

With the guidance of skilled mentors, I progressed rapidly in **Android app development**—eventually becoming capable of building an app from scratch and publishing it on **Google Play**. Yet, I knew this was only the beginning. My hunger for growth drove me to seek even greater challenges.

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University Years (2015 - 2019)

During my university years, I actively pursued a broad spectrum of courses while immersing myself in extracurricular activities. I enjoyed meeting new people, attending events, and embracing novel experiences—whether it was cycling around Taiwan, swimming across Sun Moon Lake, hiking high mountains, working holiday programs, canyoning, rock climbing, or surfing. Additionally, I participated in student clubs and played on my department's basketball team, making the most of my college life.

However, like many students, I experienced a phase of uncertainty, unsure of what kind of life I wanted or what career path I should pursue. I believed that **broadening my horizons** was the key to making informed decisions, as a narrow perspective could limit future opportunities.

During my senior year's winter break, I was introduced to **Java programming**, which marked my entry into the world of coding. After researching the potential of becoming a **software engineer**, I considered key factors such as **industry trends**, **the growing acceptance of remote work**, **flat organizational structures**, **skill-based career progression**, **and global mobility**. Realizing its potential, I fully committed myself to this field. After a semester of dedicated learning, I built a solid foundation in Java programming before graduation.

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Skills & Expertise

Web Development

• Frontend: React.js, Next.js, Tailwind CSS, HTML

- Backend: Node.js, Express.js
- APIs: RESTful API, GraphQL API
- Blockchain Integration: Web3.js, Ethers.js, Viem (DApp interactions)
- Web3 Wallet Integration: Wagmi, RainbowKit
- Al-Enhanced Applications: LLMs, LangChain, RAG (Retrieval-Augmented Generation) for Al Agents

AI / Machine Learning / Data Analytics

- Programming & Data Processing: Python, R, SQL, Pandas (data analysis & visualization)
- ETL & Data Pipeline: Designing and managing ETL workflows for machine learning models
- Machine Learning Models: k-NN, Naive Bayes, SVM, Decision Trees, Random Forest, MLP
- Deep Learning & Frameworks: Scikit-learn, TensorFlow, PyTorch (model development & training)

Blockchain & Smart Contract Development

- Core Development: Solidity, Foundry, Hardhat
- DeFi Development: Liquidity pools, dual investment strategies, arbitrage, ERC-20 token issuance, ICOs
- Advanced Smart Contract Applications: Proxy Patterns, Flash Loans, Merkle Proofs
- Security Best Practices: OpenZeppelin, EIP Standards (EIP-20, EIP-721, EIP-1155, EIP-2612, EIP-712)

Android App Development

- Architecture: MVVM, MVP
- Core Technologies: Kotlin, Android Studio

DevOps & CI/CD

- Containerization: Docker
- Automation & CI/CD: GitHub Actions

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My Public Info:

- My Email: eeha8834@gmail.com
- My English Resume: https://docs.google.com/document/d/1M67oFpvmtt3goWDx1UwUcRVJjg9CoAmyT5Z5i1hpPF0/edit?

tab=t.0

- My Chinese Resume: https://docs.google.com/document/d/1NtRDcVM5DSWKkvuwL4-QP9oz5O47ty1u3BuD9gD_bN8/edit?usp=sharing
- Personal Website: https://personal-website-qit-master-leon-wangs-projects.vercel.app/
- My Leetcode Instagram: https://www.instagram.com/daily_leetcode
- Medium Blog: https://medium.com/@eeha8834
- Licheng's Github Profile: https://github.com/WangWang0226
- LinkedIn: https://www.linkedin.com/in/lichengwang

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My Projects:

AI / ML projects:

- · Talent Match:
 - It's designed to help HR teams quickly compare multiple resumes using LLM, RAG, LangChain,
 Python, Flask, Pinecone. Simply upload the resumes along with the job description, and with a
 single click, Talent Match generates a comparison table highlighting each candidate's skills,
 experience, and education, then suggests the best overall fit, backed by three key reasons. You
 can also ask targeted questions to dig deeper into any resume details. It's a fast, intuitive way to
 streamline candidate evaluation and find the perfect match for your team!
 - Github repository link: https://github.com/WangWang0226/Talent-Match
- · LinkedIn Coffee Maker:
 - It's a simple ReAct (Reasoning & Action) AI Agent that helps users prepare LinkedIn coffee chat questions using LLM, LangChain, Python, Flask. Simply provide a name (associated with the keyword of this person), and the agent will search Google for the person's LinkedIn profile URL, iterating through results until it determines the most relevant profile. Once identified, the system scrapes key information from the LinkedIn profile and leverages an LLM to generate a concise summary of the individual. Finally, it crafts three tailored questions to help the user initiate a meaningful coffee chat with this person. Welcome to visit my Medium for more details!
 - Github repository link: https://github.com/WangWang0226/coffee-maker

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Blockchain Projects:

Dual-Investment Platform:

- This platform enable users to experience dual investment on the Sepolia testnet! This Dual-Investment Platform showcases my full-stack development expertise, spanning frontend, backend, and blockchain smart contracts. It simulates a DeFi investment mechanism, allowing users to invest and earn returns based on market conditions. Frontend is Built with Next.js, the UI is designed for an intuitive and seamless user experience. Backend is Developed using Express.js, ensuring smooth API and blockchain interactions. Smart Contracts, the secure, automated transactions are powered by Solidity and deployed on the Sepolia testnet.
- Github repository link: https://dual-investment-git-master-leon-wangs-projects.vercel.app/

Share-Prawn:

- Share Prawn is a profit-sharing ERC20 token inspired by the Safemoon implementation. Users can lock their tokens, and the longer they lock them, the higher their profit-sharing ratio. Each transfer incurs a 5% tax, which is immediately distributed to all token holders based on their balance through a burn mechanism. Selling tokens on Uniswap incurs a 10% tax, with 5% allocated to adding liquidity to the Uniswap liquidity pool and the remaining 5% distributed to users who have locked their tokens.
- Github repository link: https://github.com/WangWang0226/Share-Prawn

• Sqrt Liquidity ICO:

- This smart contract is designed to create a fair and dynamic ICO mechanism by leveraging a liquidity pool model similar to those used in DeFi platforms. This contract allows participants to deposit dual tokens (e.g., ETH and USDC) and calculates their share of ICO tokens based on the sqrt(k) model. Key mechanisms include a time-based linear interpolation to reduce the maximum allowable units (maxUnits) over the ICO duration and dynamic share allocation based on token deposits.
- Github repository link: https://github.com/WangWang0226/SqrtLiquidityICO

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Android Project:

- Taiwan Comic Base:
 - This app provides venue seat reservations and the latest updates, available on Google Play. It
 integrates Google/Facebook third-party login and follows the MVVM architecture.
 Additionally, it implements Firebase Cloud Messaging (FCM) for push notifications. To enhance
 the user experience, a custom calendar component was developed to meet specific
 requirements.
 - Github repository link: https://play.google.com/store/apps/details?id=com.tcb.official