Kuan-Ting Chou

Senior Software Engineer | 9+ Years of Experience

Technical Profile

- **Backend**: Node.js, TypeScript, C#, Move (Sui), Microservices, RESTful APIs
- **Infrastructure**: AWS (ECS, SQS, RDS), **Terraform (IaC)**, Docker, GitHub Actions
- **Quant**: Financial Backtesting, API Integration (Bybit/Finlab), Risk Control
- **Specialties**: Automated Testing (90% Coverage), PID Control, RS232, LLM Agents

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Professional Experience

AIFIAN | Senior Backend Engineer

Jan 2024 – Feb 2026

- **High-Reliability Payment Architecture**: Integrated payment gateways (Stripe, Wise) using Adapter patterns. Designed a **dual-layer reconciliation system** with **AWS SQS** and **cron-based async repair** to ensure eventual consistency and guaranteed idempotency.
- **Infrastructure as Code**: Managed scalable ECS/RDS/SQS stacks via **Terraform Modules**, maintaining **99% SLA** and consistent environment parity.
- **Performance Engineering**: Conducted heap snapshot analysis to diagnose memory leaks, reducing memory usage from **40% to 3%**; achieved **90% unit/integration test coverage**.

River Games | Senior Software Engineer / Lead

Mar 2020 – Jan 2024

- **High-Performance Engine**: Implemented **Unity ECS** with custom 2D rendering and physics. Leveraged the **C# Job System** to scale entity processing from 100 to 2,000+.

- **Framework Design**: Established DI (Zenject) and MVC patterns to decouple legacy code; designed a Google Sheets-driven workflow to enable data-driven development.
- **Cross-Platform Strategy**: Encapsulated core combat logic into a shared C# codebase, ensuring consistency between the Unity client and .NET backend.

Freelance Software Engineer

Nov 2018 – Mar 2020

- **Hardware-Software Integration**: Developed a custom **Keyframe Editor** for industrial robots at National Taichung Theater. Implemented **PID control algorithms** for a kinetic installation at TFAM, stabilizing motor output via real-time feedback.
- **Multimedia Pipeline**: Engineered a low-latency pipeline using **Texture Sharing** and **Shader-to-DMX** for real-time light/projection synchronization; implemented Python-based audio routing.

Early Career in Japan

- **Asobimo, Inc.** (Japan): Rebuilt combat editors using Unity Timeline and developed Behavior Tree AI modules.
- **SEGA** (Japan): Developed facial animation tools for the Technical Artist team on the *Yakuza* series.

Key Projects

- **Quant Trading**: Achieved **+59.0% annual return**, **-21.3% MDD**, and **2.2 Sharpe ratio** in Taiwan's stock market.
- **Sui Infrastructure**: Built a custom **Indexer** for optimized blockchain data retrieval; managed AWS infrastructure via **Terraform**.
- **AI Astrology**: Engineered a Zi Wei Dou Shu engine with LLM-based **agentic workflows** for structured fortune analysis.

Education

- **M.S. in Networking and Multimedia**, National Taiwan University (2014 – 2017)
- **B.S. in Computer Science and Information Engineering**, National Taiwan University (2010 – 2014)