

Chun-Lin Lai

Software Engineer & Energy Market Analyst

Tokyo, Japan LinkedIn <https://www.linkedin.com/in/chun-lin-lai-7a7808233/>

GitHub <https://github.com/lin-1014>

SUMMARY

Software engineer and energy market analyst based in Tokyo, working at the boundary between Japan's power markets and battery energy storage systems (BESS). Develops backend systems, data pipelines, and analytical tools that connect market processes on the Japan Electric Power Exchange (JEPX) and in the EPRX balancing market with on-site energy management systems (EMS). Works in Japanese and English, with cross-border experience in Taiwan and Japan.

EXPERIENCE

Lehman Holdings — Software Engineer & Energy Market Analyst

Nov 2025 – Present

Software engineering and market analysis for battery storage operations in Japan's power markets.

- Develop backend systems and data pipelines for battery storage operations.
- Analyze JEPX and EPRX market data to support bidding and dispatch decisions.
- Work with operations and market teams on requirements, in Japanese and English.

Recharge Power — Senior Backend Engineer

Feb 2025 – Sep 2025

Backend design and development across services and data pipelines.

- Designed and developed backend services and REST APIs in Python (Django, FastAPI) on PostgreSQL.
- Built and maintained data pipelines and analytical features, and supported deployment on Docker and AWS.
- Reviewed code and coordinated technical work with other engineers.

Recharge Power — Backend Engineer

Sep 2023 – Jan 2025

Backend engineering on services and data pipelines.

- Developed backend features and REST APIs in Python on PostgreSQL.
- Implemented data pipelines and reporting features.
- Set up Docker-based development environments and a CI-friendly project structure.

The News Lens — Data Analyst Intern

Feb 2023 – Sep 2023

Data analysis internship supporting internal teams.

- Wrote SQL and Python analyses for internal teams.
- Prepared recurring reports and kept the underlying analysis reproducible.

Earlier library internship, before moving into software and data work.

SELECTED PROJECTS

Japan BESS Market Operations Platform

An Aggregation Coordinator (AC) platform that connects JEPX and EPRX market processes with battery sites through EMS integration, from bid suggestion to performance reporting.

Python · Django · PostgreSQL · REST APIs · Docker · AWS · EMS/PCS/BMS integration and telemetry

EPRX Market Price Analysis Tool

A data pipeline and analysis tool for balancing-market prices by product and time block, built to support bidding decisions and give the team a reproducible view of how each product has been priced.

Python · pandas · SQL · PostgreSQL · Time-series analysis · Reporting

BESS Revenue Monitoring and PV Forecasting Platform

Revenue monitoring across battery sites, combined with PV generation forecasting and JEPX price forecasting for dispatch and decision support.

Python · FastAPI · PostgreSQL · pandas · Time-series forecasting · Docker · AWS

SKILLS

Backend & Platform	Python, Django, FastAPI, PostgreSQL, REST APIs, Docker and AWS, CI-friendly project structure
Data & Analytics	Data pipelines, Time-series analysis, Forecasting workflows, Reporting, Analysis in pandas and SQL
Energy Markets	JEPX spot and intraday markets, EPRX balancing-market products, 30-minute settlement intervals, Bidding workflows, Market rule interpretation
BESS & Operational Systems	Battery dispatch scheduling, EMS/PCS/BMS integration, Telemetry ingestion, Operational constraints (state of charge, power limits, availability)
Cross-Functional Delivery	Working with operations and market teams, Turning requirements into system logic, Bilingual (JA/EN) documentation and communication, Taiwan–Japan cross-border collaboration

EDUCATION

National Taiwan University — BA, Library and Information Science

LANGUAGES

Japanese	JLPT N2 — professional written communication and everyday workplace conversation
English	Professional working proficiency
Mandarin Chinese	Native (Taiwan)