

Jefferson Lim

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Professional Experience

RWE Supply & Trading, Quantitative Software Engineer, Chicago, IL

Sep 2024 - Present

- Implemented quantitative trading strategies calculating battery dispatch optimization
- Designed and parameterized real-time energy market congestion analysis using real-time change detection algos
- Developed scalable, distributed data pipelines on Databricks and optimized SQL & Spark queries, reducing critical market data processing from minutes to seconds across 1,000+ critical front-office market data pipelines
- Led project to build a monitoring system and event-driven notification engine for real-time anomaly visualization, ensuring reliability and quality assurance on our data workflows across 30+ international data vendors
- Built internal Python, FastAPI libraries and platform tooling to streamline data engineering & ETL workflows
- Created interactive dashboards in Tableau for data-driven VaR, volume, and PnL monitoring

Pebblely, AI + Software Engineer Intern, Singapore

Jan - Jul 2024

- Implemented VTON models in Python & Stable Diffusion for Gen AI fashion and product photography
- Implemented queueing system with RabbitMQ and AWS Lambdas to handle distributed batch processing
- Revamped Vue frontend to better support mobile-friendly canvas editing and batch generation feature

Singapore Economic Development Board, Software Engineer Intern, Singapore

May - Aug 2023

- Led development on Typescript library for organization-wide Design System, reducing 50% off development time across 3 cross-functional projects involving designers and engineers
- Implemented automated regression tests for frontend components with Playwright, achieving 99% coverage

AI Center for Education Technologies, Fullstack Software Engineer Intern, Singapore

May - Aug 2022

- Developed new frontend for online learning platform in React + Typescript used by over 1,000 students in NUS
- Optimized load times for pages by 10x using frontend virtualization and Rails backend querying techniques

Publications

Zhu Zicheng, Tianqi Song, Jefferson Lim, Chi-Lan Yang and Yi-Chieh Lee, "Exploring the Effects of Shared Similarity on Human Willingness to Seek Social Support from Chatbots", accepted at ICLR 2025 workshop

Education

National University of Singapore | B.Comp Computer Science, Honours (Distinction)

2020 - 2024

Selected Courses: NLP, Machine Learning, Information Retrieval, Software Product Engineering, Big Data Systems

University of Southern California | Exchange Program (awarded NUS Exchange Scholarship)

Fall Semester 2022

Champion, Product@SC Fall 22 Case Competition | Photojournalist, Annenberg Media

Technical Projects

Playces | Founding member + Tech Lead

2024 - Present

Transforming underutilized spaces in Singapore into vibrant third spaces — serving over 100 communities

Dark Pool | Quant Engineer

2024

Implemented a synthetic dark pool in Python focusing on routing and systematic trade execution strategies

First runner up @ Bank of America Code to Connect Hackathon APAC 2024

Goodhub SEA | Founding Fullstack Developer

2023 - 2024

Building a community of tech experts and enthusiasts throughout Southeast Asia who wield tech for good

Buimatix | Fullstack Developer

2023

Using computer vision to reduce embodied carbon for more sustainable developments

Champion @ NUS N-novate Challenge Hackathon, Top 8 National Finalist @ SDG Open Hack Singapore 2023

Runstarter | Product Lead + Mobile App Developer + Designer (Figma)

2023

Augmented reality running app with voice-powered minigames, built in React Native

Leadership

Solve@NUS, Founder & Tech Lead

2024

- Pioneered a club that writes and solves esoteric puzzles. Organizer and tech lead of NUS Orientation hunt

Skills + Tools

Webdev React, Svelte, Vue, Angular, Typescript, Webpack, Tailwind CSS, AWS, Docker, Azure Devops, FastAPI

Data + AI/ML Databricks, Pandas, PyTorch, Spark, SQL, Supabase, Ruby on Rails, NLP, GCP, C#

Product Design UI/UX Design, Facilitation, Figma, SEO, Adobe Photoshop, Agile

Certifications Google Professional Machine Learning Engineer, Bloomberg Market Concepts, Options Strategies

Work Authorization

Singapore Citizen; Eligible for H1B1 visa to the United States (separate pool from H1B)