

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)