

# Min Zhe Cheah

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## EDUCATION

### University of California, Berkeley

Data Science, B.A.

Graduated: August 2025

**Relevant Coursework:** Data Structures & Algorithms, Object Oriented Programming, Foundations of Data Science, Machine Learning, Data Mining, Data Engineering, Probability, Computer Security

## SKILLS

**Languages :** Python, Java, Go, C, C#, C++, JavaScript/TypeScript, SQL, HTML/CSS, Bash

**Frontend :** React, React Native, Next.js

**Backend :** Node.js, Express.js, PostgreSQL, MongoDB, NoSQL, MySQL, Firebase, REST API, FastAPI

**Cloud & DevOps :** GCP, AWS, Docker, Kubernetes, Vercel, Render, Git, GitHub Actions

**Data & Machine Learning :** Pandas, NumPy, Scikit, Matplotlib, Jupyter Notebook, PyTorch, OpenAI API, LangChain

## EXPERIENCE

### Illominate (Software Engineer Intern) - Los Angeles, CA

July 2025 - October 2025

- Designed and built an iOS mobile application using React Native and TypeScript, delivering MVP to App Store and acquiring first 77 beta users with 60% retention rate.
- Developed 12+ backend REST API endpoints using ASP.NET Core and C#, deployed as AWS Lambda microservices with API Gateway, reducing API response time from 180ms to 130ms.
- Architected a personalized recommendation system processing 100+ daily interactions, delivering targeted parent-child activities that became the app's most used feature.
- Enhanced frontend user experience by implementing responsive UI components, partnering with UI/UX designers to deliver smooth interfaces that achieved 5 star App Store rating.

### FHL Vive Center Research Lab (Software Engineer) - Berkeley, CA

June 2024 - December 2024

- Built LLM powered teaching assistant integrating OpenAI GPT-4 API, implementing caching and prompt optimization, handling 1,000+ student queries weekly with sub-3-second response times.
- Designed Retriever-Augmented Generation (RAG) pipeline to convert text passage chunks into embeddings, accompanied with a built-in evaluation pipeline.
- Automated transcription pipeline with OpenAI Whisper and Python, processing 200+ hours of video content into searchable, timestamped transcripts.

### See Hau Global (Data Analyst Intern) - Kuala Lumpur, Malaysia

June 2023 - August 2023

- Analyzed sales and operations data in Oracle Fusion Cloud ERP, automating reports that saved 8 hours weekly.
- Built Python/SQL dashboards with cross-functional teams, reducing report generation from 3 days to 1 day.
- Identified bottlenecks causing 12% drop in fulfillment through data analysis, saving \$50K in monthly revenue.

## PROJECTS

### AutoTrip (Calhacks 12.0)

- Developed an AI-agent travel web app with FastAPI and Python that integrates Google Maps, Amadeus, and Instagram APIs, generating optimal routes, hotel suggestions, and trending attractions in real time.
- Leveraged LangChain and OpenAI to summarize and personalize itineraries, producing outputs with cost breakdown, travel times, hotel bookings, and embedded maps.
- Deployed web app via Vercel with async API handling, caching, and data validation for reliable user performance.

### Secure File Sharing System (Computer Security)

- Developed secure file sharing in Go using AES-CTR, HMAC-SHA-512, and RSA cryptography to ensure data confidentiality, integrity, and authenticity on untrusted storage.
- Implemented authentication with password-based key derivation and public-key cryptography, designing efficient data structures for upload, download, append, share, and revoke operations.
- Conducted threat modeling against active adversaries and implemented fine-grained access control with instant revocation, validated through extensive unit testing.