

CHUN KHAI, KOK

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EDUCATION

National University of Singapore, NUS

2021 - 2025

Bachelor (Honors) of Computing in Computer Science, *Final Year*

EXPERIENCE

TikTok

May 2024 - Current

Software Engineer Intern,

Singapore

- *Tech Stack:* Go, Apache Thrift, gRPC, Kubernetes, Redis
- Accelerated development cycles by **refactoring and modularizing code to eliminate geolocation-specific dependencies**, achieving a 10% reduction in development time and enhancing deployment efficiency across new data centers.
- Performed an **migration of a core database to a sharded architecture**, enabling future expansion to handle up to 30TB of data with minimal downtime and ensured stability by coordinating closely with dependent services.
- **Developed internal documentation** that reduced onboarding time and improved cross-team collaboration, facilitating smoother upstream and downstream integration with our services.

Scooterson

May 2023 - Sep 2023

Software Engineer Intern

Singapore

- *Tech Stack:* TypeScript, Django REST Framework, ExpressJS, Redis
- Worked on the migration to a **microservices-based backend**, optimizing the system's scalability and enabling expansion to serve a larger traffic volume.
- Collaborated on **optimizing SQL queries** and implementing **Redis caching**, resulting in faster data retrieval and reduced load times by over 15%.
- Integrated **JWT-based authentication** into existing APIs, contributing to enhanced user data protection.

NUS School of Computing

Aug 2022 – Present

Undergraduate Teaching Assistant

Singapore

- *Courses Taught:* Data Structures and Algorithms, Operating Systems
- Guided students to reason about the design of algorithms, and offer feedback on system level code.
- Offer assistance to academic faculty in developing course materials throughout the semester.

PROJECTS

TunesBlend

- Designed and developed a **performant ML recommendation model using Scikit and TensorFlow** to deliver personalized song recommendations based on user's Spotify playlist
- Built a responsive NextJS web application, integrating the ML model via Flask and Pickle on an AWS EC2 instance for optimal responsiveness and scalability

TECHNICAL SKILLS

- **Languages:** Python, Go, TypeScript
- **DevOps:** AWS, Google Cloud Platform, Docker
- **Frameworks:** ExpressJS, Django REST Framework, NextJS
- **Databases:** SQL (MySQL, PostgreSQL), NoSQL (MongoDB, DynamoDB, Redis), Object Stores (S3, Google Cloud Storage)
- **Library/Tools:** TensorFlow, PyTorch, Pandas