Kenneth Seet

+65 88763627 | kseet.dev | github.com/itstrueitstrueitsrealitsreal | linkedin.com/in/kenneth-seet | kenurfseet@gmail.com

EDUCATION

National University of Singapore   Aug. 2022 - Jan. 2026
Bachelor of Computing in Computer Science
- **Grade Point Average**: 4.44/5.00, Honours (Distinction)
- **Coursework**: Data Structures & Algorithms, Operating Systems, Computer Networks, Parallel & Concurrent Programming
- **Courses Taught/Mentored**: Object-Oriented Programming, Software Engineering

EXPERIENCE

TikTok   Jan. 2026 - Present
Backend Software Engineer, Local Services - Governance Platform   *Singapore*
ByteDance   Jun. 2025 - Dec. 2025
Software Engineer Intern, Foundational Technology   *Singapore*
- Contributing to **KubeAdmiral**, a multi-cluster **Kubernetes** federation system, which manages **210,000 nodes** and supports over **100,000 microservices** internally.
- Resolved a logging bottleneck with **Zerolog logging** & **Lumberjack log rotation**, implementing non-blocking, async message handling during high disk I/O.
- Upgraded KubeAdmiral's internal metrics library and added alerting metrics for dropped logs, enabling on-call engineers to proactively address issues related to the previous log-blocking bottleneck.
- Optimized multi-cluster scheduling by designing and implementing scheduling plugins to reduce resource fragmentation and improve debugging, leading to a **30% improvement** in cluster utilization.
- Streamlined SRE operations by developing an automated workflow for SREs using a **RESTful API** in Go, which validated human inputs before interacting with the **Kubernetes API**, minimizing human error by replacing CLI operations.

Autodesk   Jan. 2025 - Jun. 2025
Software Development Engineer Intern, Identity Service Team   *Singapore*
- Maintained and enhanced Autodesk's Authorization API, a **RESTful API** utilizing **OAuth 2.0** and **OpenID Connect** standards to authorize requests for over **20 million monthly active users**.
- Migrated Go integration tests from stdlib to **Ginkgo BDD** framework, collaborating with PMs/QAs to boost test efficiency and reliability.
- Engineered **Go CLI tools** using Viper to automate feature flag archival, eliminating manual reviews, saving ∼**2 hours/week**.
- Authored and updated **OpenAPI documentation** to ensure the public-facing API specification remained accurate and up-to-date with new features.
- Worked within an Agile scrum workflow, participating in daily stand-ups and sprint retrospectives to drive continuous improvement.

Home Team Science & Technology Agency   May. 2024 - Aug. 2024
Full Stack Engineer Intern, Q Team   *Singapore*
- Spearheaded an automated assessment platform for **all ten MHA agencies** by researching and integrating state-of-the-art **LLMs** (incl. **LLaMA3.1**, **Mixtral**) to generate and mark questions from training manuals.
- Engineered and deployed a full-stack, modular application, designing its architecture with **Docker** for cloud-based trials, building the UI in **React**, and securing the **FastAPI** and **MySQL** backend with **JWT authentication**.
- Utilized **Swagger UI** for testing and validating API endpoints, ensuring the functionality and adherence to the API contract during the development process.
- Contributed to the full **Software Development Life Cycle (SDLC)**, engaging with stakeholders to gather requirements, define features, and collaborating with teammates to support the project through to final testing and deployment.

PROJECTS

TEAMMATES   Jun. 2024 - Present
- Maintained **TEAMMATES**, an award-winning open-source feedback management system active since 2010, used by over **1,000,000 users** in **1,100+ universities** worldwide and featured in **Google Summer of Code**.
- Collaborated with a global community of contributors to enhance the **CI/CD** pipeline by creating automated workflows for issue and PR management, improving project maintainability and developer experience.

TECHNICAL SKILLS

Languages: Go, Java, Python, TypeScript
Libraries, Frameworks & Tools: Kubernetes, Git, PostgreSQL, MySQL, MongoDB, FastAPI, AWS, Docker, Next.js, Node.js, React, React Native, Ginkgo, Github Actions, Firebase
Certifications: AWS Certified Solutions Architect - Associate (SAA-C03)