

Teo Kai Jie (Kendrick)

☎ +65 8128 0249 | ✉ kj.teo.work@gmail.com | 🌐 pixelhypercube.github.io | [in kai-jie-teo](https://www.linkedin.com/in/kai-jie-teo) | 🌐 [pixelhypercube](https://pixelhypercube.github.io)

EDUCATION

Nanyang Technological University

Expected Jul 2028

Bachelor of Computing (Honours) in Computer Science

Singapore

- **Current GPA: 4.64/5.00** (Highest Distinction)

Singapore Polytechnic

Mar 2022

Diploma in Information Technology

Singapore

- **Final GPA: 3.80/4.00**

EXPERIENCE

Singapore Armed Forces

Dec 2022 – Aug 2024, May 2025 – Jul 2025

Software Engineer (NSF)

Singapore

- Engineered & deployed a **Node.js & EJS** QR code attendance system to automate check-in for **200+ participants** and earning a **feature on Army News** for its operational impact.
- Systematically tested and validated the unit's Telegram chatbots, boosting system reliability and reducing user-facing issues by **~80%** compared to pre-testing periods.
- Thoroughly tested a PowerApps-based manpower tasking application & developed a mobile variant, successfully closing **300+ high-priority cases**.

EcoExchange Pte. Ltd.

Oct 2021 – May 2022

Frontend Developer (Final Year Project, Singapore Polytechnic)

Singapore

- Provided **technical guidance** and **mentorship** to **2 frontend developers** to successfully create and deploy the company's intranet website (**HTML5/CSS/JS**) that performs their current work functions digitally.
- Engineered the core digital workflow, successfully migrating the client from a paper-based process and enabling the system to track and process **700+ critical operational tickets**.

Leaptron Engineering Pte. Ltd.

Feb 2021 – Aug 2021

Software Engineer (Intern)

Singapore

- Enabled real-time operational oversight by developing **C# (WinForms)** applications with live alarm handling and spatial inventory visualization.
- Deployed an **Android (Java)** QR scanning tool, replacing manual data entry and reducing logistical errors.
- Accelerated warehouse workflows for **20+ staff** by optimizing **Node.js** servers and refining complex **MySQL** stored procedures, improving query response times.
- Reduced manual staff workload by **~25%** by deploying a low-code (AppGyver) warehouse application that automated key reporting and workflow processes.

PROJECTS

CellCollab | Website | Source Code

React.js | Node.js | Heroku

- Engineered a live multiplayer Conway's Game of Life sandbox **with real-time concurrent editing & simultaneous data synchronisation** using **Socket.IO** room-based channels.

pySquidGame | Source Code

Python | Pygame

- Designed a game using OOD principles and a custom impulse-based physics engine for collision dynamics.

Astertris | Source Code

Java 2D | Java Swing

- Engineered a Tetris game with radial gravity, leveraging 2D Matrices & Queues for deterministic generation logic.

SKILLS

- **Languages:** JavaScript, HTML5, CSS, Python, Java, TypeScript, SQL, C#, C++
- **Frameworks:** Node.js, Express.js, React.js, Next.js, Bootstrap, Android SDK
- **Databases:** PostgreSQL, MySQL, MariaDB, MongoDB
- **DevOps:** Heroku, Git, GitHub