Teo Kai Jie (Kendrick)

📞 +65 8128 0249 | ✉ kj.teo.work@gmail.com | 🌐 pixelhypercube.github.io | 💼 kai-jie-teo | 🔗 pixelhypercube

EDUCATION

Nanyang Technological University   Singapore
Bachelor of Computing (Honours) in Computer Science   *Expected July 2028*
- CGPA: **4.64/5.00**
- Relevant Coursework: Data Structures & Algorithms, Object Oriented Programming, C & C++ Programming

Singapore Polytechnic   Singapore
Diploma in Information Technology, Final GPA: **3.80/4.00**   *Mar 2022*

EXPERIENCE

Singapore Armed Forces   Singapore
Administrative Support Assistant (NSF)   *Dec 2022 – July 2025 (Service Disrupted for NTU Studies)*
- 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, identifying and reporting critical bugs to enhance system reliability and significantly reduce user-facing issues.
- Thoroughly tested a PowerApps-based manpower tasking application & developed a mobile variant, successfully closing **300+ high-priority cases**.

EcoExchange Pte. Ltd.   Singapore
Volunteer Web Developer   *Mar 2022 – May 2022*
- Proactively refactored and debugged the internal data submission system (HTML/CSS/JS), ensuring system stability for daily operational workflows.
- Successfully streamlined the data processing workflow, significantly accelerating critical work processes such as report generation and ticket creation within the company's system.

Leaptron Engineering Pte. Ltd.   Singapore
Software Engineer (Intern)   *Feb 2021 – Aug 2021*
- Developed multi-platform applications using **C# (WinForms)** for advanced features like real-time alarm handling and spatial inventory visualization.
- Engineered and developed **Android (Java)** QR scanning tools to streamline logistical data collection.
- Optimized **Node.js** servers and refined **MySQL Databases** to streamline warehouse workflows for 20+ staff.
- Engineered and deployed a warehouse application using a rapid development platform (AppGyver), seamlessly integrating with existing **Node.js** servers to automate key reporting and workflow processes.

PROJECTS

CellCollab (Personal Project) | *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 (Personal Project) | *Python, Pygame*
- Designed a game using OOD principles and a custom impulse-based physics engine for collision dynamics.

Astertris (Personal Project) | *Java 2D, Java Swing*
- Engineered a radial gravity Tetris variant using OOD principles, leveraging 2D Matrices and Queues for deterministic generation logic.

SKILLS

- **Languages**: JavaScript, HTML/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