Teo Kai Jie (Kendrick)

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EDUCATION

Nanyang Technological University   Singapore
Bachelor of Computing (Honours) in Computer Science   *Expected Graduation, 2028*
- Current Grade Point Average (GPA): **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 – Aug 2024 & May 2025 - July 2025*
(Service Disrupted Aug '24 – May '25 for first year NTU Studies)
- Deployed a **Node.js/EJS** QR code attendance system that reduced check-in time by **~60% for 200+ participants**; this system was later featured on Army News for its operational impact.
- Systematically tested and validated every feature of the unit's Telegram chatbots, reporting critical issues that improved system reliability and reduced user-reported bugs by **~80%.**
- Utilized low-code/scripting tools (VBA, PowerApps) to integrate and automate administrative workflows, successfully closing **300+ high-priority cases** and enhancing reporting functionality.

Freelance (Pro Bono)   Singapore
Web Developer   *Mar 2022 – Sep 2022*
- Developed modular **Next.js** profile components for Autodesk Pte. Ltd., adhering to enterprise-level workflows.
- Proactively refactored and debugged EcoExchange's internal data submission system (HTML/CSS/JS) to meet new organizational quality standards, successfully streamlining the processing & closure of 30+ operational cases.

Leaptron Engineering Pte. Ltd.   Singapore
Software Engineer (Intern)   *Feb 2021 – Aug 2021*
- Developed C# (Visual Studio) and Android (Java) applications for QR scanning and logistical functions, accelerating operational usability by **~30%**.
- Optimized Node.js servers (using SSH/Postman) and refined MySQL Stored Procedures for database efficiency, supporting 20+ warehouse staff.
- Rapidly developed and deployed a no-code (AppGyver) warehouse application, integrating with existing Node.js servers to boost workflow productivity by **~25%**.

PROJECTS

CellCollab (Personal Project) | *React.js, Node.js, Heroku*
- Engineered a live multiplayer Conway's Game of Life sandbox, allowing multiple users to use at the same time.
- Utilised **Socket.IO** to engineer a live communication channel, maintaining sub-50ms latency for concurrent users.

pySquidGame (Personal Project) | *Python, Pygame*
- Designed a game with Object-Oriented Design (OOD) & KD-Tree spatial data structures to build scalable game components, integrating a custom impulse-based physics engine for collision dynamics.

Astertris (Personal Project) | *Java 2D, Java Swing*
- Engineered a Tetris variant that incorporates radial gravity mechanics using Object-Oriented Design (OOD) principles & relevant data structures for game functionality.

SKILLS

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