

# Teo Kai Jie (Kendrick)

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## EDUCATION

**Bachelor of Computing (Honours) in Computer Science** Aug 2024 - Present  
Nanyang Technological University, Singapore

- Current CGPA: 4.64/5.00 (Honours - Highest Distinction)

## EXPERIENCE

**Singapore Armed Forces** Dec 2022 - Aug 2024, \*May 2025 - July 2025  
*Administrative Support Assistant (NSF)* Singapore

- Developed and deployed a QR code attendance tracking system for non-training events using EJS, Node.js, and MongoDB, with email-generated QR codes enabling seamless, real-time verification.
    - Reduced check-in time by ~50% for 200+ participants during SAF Pers Hubs' Total Defence Day Event in February 2023.
    - Featured in Army News for contributions to digital transformation as part of the DigiAI Development Team.
  - Participated in the development and user testing of Telegram chatbots (Parade State, Events, Pers Node Enquiry)
    - Identified and fixed bugs, improving chatbot stability and reducing user-reported issues by ~80%.
  - Enhanced an Excel .xlsm tool using VBA to automate the generation of SAF Pers Hubs' weekly Routine Orders.
    - Added new features, fixed existing bugs, and improved formatting automation in response to evolving unit requirements.
  - Contributed to the testing and development of PAL (Personnel Admin Link), a Microsoft PowerApps-based tasking platform for managing manpower assignments across Personnel Nodes (Persnodes) in Singapore.
    - Implemented new features and co-developed a mobile-friendly version of the app.
    - Helped reduce bug reports by ~60% through iterative testing and user feedback integration.
- \* National Service (NS) was disrupted for full-time studies at NTU from Aug 2024 to May 2025.

**Web Developer** Feb 2022 - Oct 2022  
*Freelance* Singapore

- Improved intranet platform functionality and user experience for EcoExchange Pte. Ltd. as part of SP's Final Year Project using HTML/CSS/JS.
- Developed and integrated reusable Next.js profile cards for Autodesk using TypeScript, enhancing component testing workflows and improving UI reliability.
- Reduced technical issues by ~30% and improved interface efficiency by ~50% through targeted front-end optimizations.

**Leaptron Engineering Pte. Ltd.** Feb 2021 - Aug 2021  
*Software Engineer (Internship)* Singapore

- Developed and tested full-stack solutions—including Android apps (Java), C# applications, and Node.js servers—with comprehensive MySQL database design and modeling
  - Improved system responsiveness by ~30% and supporting 20+ staff in digital adoption.
- Designed relational database schemas, applied normalization principles, and optimized queries to ensure data integrity and efficient performance.
- Utilized UI/UX tools and IoT technologies (Appgyver, Modbus) to enhance system functionality, increasing UI feasibility by ~20%.

## PROJECTS

### CellCollab (React.js, Node.js)

- Built a real-time multiplayer Conway's Game of Life sandbox featuring WebSocket-based room synchronization, live grid updates, and collaborative editing capabilities.

### pySquidGame (Python, Pygame)

- Developed an interactive Squid Game-inspired app using object-oriented design, with modular stage architecture, responsive player controls, and animated UI transitions.

### Mini Speed Golf (Python, Pygame)

- Developed a 2D minigolf game with realistic physics, collision detection, scoring, and multi-map support.

## SKILLS

- Programming Languages:** Python, Java, C, C++, C#, JavaScript, TypeScript
- Web Development & Frameworks:** HTML, CSS, React.js, Next.js, Node.js
- Databases:** MongoDB, MariaDB, MySQL
- Tools & Platforms:** Git, GitHub, Heroku, VMWare Workstation Pro, Microsoft Office Suite, Android Studio
- Designing & Prototyping:** Figma, Canva