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   Singapore
- Developed a QR code attendance system using EJS to streamline check-ins for non-training events. Integrated email-generated QR codes for seamless, real-time verification.
  - Successfully deployed the system during Total Defence Day, enabling 200+ participants to scan their attendance efficiently and reduced check-in time by ~50%.
  - Featured in Army News for contributions to digital transformation as part of the DigiAI Development Team.
- Enhanced an Excel .xlsm file with embedded VBA to generate weekly Routine Orders documents.
  - Added new features, fixed bugs, and improved formatting automation to align with evolving unit requirements.
- Standardized and maintained daily parade state records in Excel, consolidating inputs from 26 dispersed units to ensure accurate and timely personnel reporting.
- Contributed to the PAL App Trial (Personnel Admin Link), a Microsoft PowerApps-based tasking platform for managing manpower assignments across Personnel Nodes (Persnodes).
  - Participated in usability testing, implemented new pages, and helped design a mobile-friendly variant based on feedback from Personnel Nodes.
- Participated in Telegram chatbot trials led by HQ, providing user feedback and evaluation support for handling Parade State, Events, and Personnel Node Enquiry chatbots.
- Provided digital tool support to staff, resolving user queries and guiding effective use of in-house systems, improving operational efficiency.

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 React.js test cards for Autodesk, 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, improving 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, Socket.IO, 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 & Frameworks:** Python, Java, C, C++, C#, JavaScript, React.js, Node.js, Socket.IO
- **Databases, Markup & Scripting:** MySQL, MongoDB, HTML, CSS, LaTeX
- **Tools, Platforms & Design:** Git, GitHub, Heroku, VMWare Workstation Pro, Microsoft Office Suite, Figma, Canva