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: Honours (Highest Distinction)

EXPERIENCE

Singapore Armed Forces

Dec 2022 - Aug 2024, May 2025 - Present

Singapore

Administrative Support Assistant

- Developed a QR Code attendance scanning system to streamline check-ins for non-training events, integrating email-generated QR codes for seamless verification.
 - Successfully deployed the system during Total Defence Day, enabling 200+ participants to scan their attendance efficiently and reduced check-in time by ~50%.
- Supported the testing and operational evaluation of Personnel Admin Link (PAL), a job tasking application designed to streamline manpower assignments across Personnel Nodes (Persondes).
- Contributed to the ideation, UI/UX design, and coding of new feature pages within the existing PAL application, helping enhance user experience and functionality based on operational needs and feedback.

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)

- Developed a real-time multiplayer sandbox for Conway's Game of Life using React.js (frontend) and Node.js with Socket.IO (backend).
- Enabled synchronized board interactions, room-based sessions, and live cell updates through WebSocket communication.

pySquidGame (Python, Pygame)

- Built a playable Pygame application inspired by Netflix's Squid Game, featuring interactive stages like Red Light, Green Light with stage selection, player controls, and dynamic UI.
- Designed modular game architecture using object-oriented principles to enable future expansion (e.g., Tug of War, Marbles, etc.).

PHC-Minigolf (Python, Pygame)

- Built a physics-based 2D minigolf game using Python and Pygame, featuring realistic ball mechanics, collision detection, and interactive levels.
- Designed multiple playable maps and integrated a scoring system with user input handling and visual feedback.

SKILLS

- Programming & 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

WORK AUTHORIZATION

Singapore Citizen with unrestricted work rights; eligible for US H-1B1 and J-1 visas