# Teo Kai Jie (Kendrick)

6thetce@gmail.com | pixelhypercube.github.io | github.com/pixelhypercube | linkedin.com/in/kai-jie-teo/ | +65 8128 0249

## **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 - Present

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%.
- Supported the usability testing and operational evaluation of PAL, a Microsoft PowerApps-based job tasking platform for managing manpower assignments across Personnel Nodes (Persondes).
  - Contributed to feature ideation, UI/UX design, and implementation of new pages within the app, enhancing user experience and aligning functionality with operational feedback.
- Conducted data validation of internal records to ensure accuracy before automation rollout, minimizing downstream errors.
- Reviewed and corrected auto-generated documents, maintaining formatting and content consistency to uphold documentation standards.
- Enhanced internal automation tools by updating VBA scripts with supervisor-directed improvements, boosting process efficiency.
- Provided ongoing user support for in-house digital tools, resolving queries and guiding staff on effective usage.

## **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)

• Created a real-time multiplayer Conway's Game of Life sandbox using React.js, Node.js, and Socket.IO, supporting synchronized live updates and room-based interactions via WebSockets.

#### pySquidGame (Python, Pygame)

• Developed a modular Pygame application inspired by Squid Game, implementing interactive stages, player controls, and a dynamic UI with object-oriented design for future extensibility.

## PHC-Minigolf (Python, Pygame)

• Built a 2D physics-based minigolf game in Python (Pygame), featuring realistic mechanics, collision detection, multiple maps, scoring logic, and responsive user input handling.

## **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