# 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: 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%.
- Ensured data accuracy and document quality using Excel and Word, while supporting ~15 users/month with inquiries related to internal automated systems.
- Resumed compulsory National Service during NTU's summer break (May-Aug 2025) to fulfil remaining obligations.

#### **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.
- Implemented internal JavaScript logic and CRUD operations to enable interactive data retrieval and updates from the backend.
- 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

Singapore

Software Engineer (Internship)

- 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%.
- Provided debugging support and technical assistance to warehouse staff during software rollouts.

## **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).
  - Deployed backend server on Heroku and hosted frontend via GitHub Pages.
- Enabled synchronized board interactions, room-based sessions, and live cell updates through WebSocket communication.

## 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