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 (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 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), fixing bugs that improved stability and reduced user-reported issues by ~80%.
- Enhanced an Excel .xlsm tool using VBA to automate the generation of SAF Pers Hubs' Weekly Routine Orders as PDFs, adding new features and ensuring compilance with evolving unit requirements.
- Contributed to the testing and development of Personnel Admin Link (PAL), 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 (Pro Bono)　　　　　　　　　　　　　　　　　　　　　　　Singapore
- Continued development and maintenance of my Polytechnic's Final Year Project in collaboration with Eco Exchange Pte. Ltd., implementing new features and improving intranet website functionality using HTML, CSS and Javascript.
- Developed and integrated reusable Next.js profile cards for Autodesk using TypeScript, enhancing component testing workflows and improving UI reliability.
- Optimized front-end performance, reducing technical issues by ~30% and improving interface efficiency by ~50%.

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 SQL database design and modeling.
- Optimized system performance, improving 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.
- Enhanced UI/UX and IoT integration using Appgyver (now SAP Build Apps) and Modbus, increasing interface feasibility and functionality by ~20%.

PERSONAL PROJECTS

CellCollab (React.js, Node.js)
- Engineered 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 application using object-oriented design, incorporating stage-based architecture, responsible controls, and animated UI transitions, and all six main games from the Netflix series with accurate mechanics and progressively challenging gameplay.

Astertris (Java)
- Designed and implemented a space-themed Tetris variant with radial gravity mechanics around an asteroid, featuring custom collision handling and progressively challenging gameplay.

SKILLS

- **Programming Languages:** Python, Java, C, C++, C#, JavaScript, TypeScript, VBA
- **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