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)

Diploma in Information Technology

Apr 2019 - Mar 2022

Singapore Polytechnic • Final CGPA: 3.80/4.00

EXPERIENCE

Singapore Armed Forces

Dec 2022 - Aug 2024, *May 2025 - July 2025

Singapore

Administrative Support Assistant (NSF)

- Developed and deployed an email generated QR code attendance system using EJS, Node.is and MongoDB, reducing check-in time for hundreds of participants by ~50%.
 - Featured in Army News for contributions to digital transformations as part of the DigiAl Development Team.
- Conducted extensive user-testing of the unit's Telegram chatbots, reducing user-reported issues by ~80%.
- Enhanced an Excel .xlsm file using VBA to automate the generation of the unit's weekly Routine Orders via PDF files.
- Conducted extensive testing and development of †Personnel Admin Link (PAL), implementing new features & codeveloping a mobile-friendly version using UI & UX design principles.
- * National Service (NS) was disrupted for full-time studies at NTU from Aug 2024 to May 2025.
- † A Microsoft PowerApps-based tasking platform for managing manpower assignments across Personnel Nodes.

Feb 2022 - Oct 2022

Singapore

Web Developer Freelance (Pro Bono)

- Voluntarily extended collaboration with Eco Exchange Pte. Ltd. by enhancing our existing Polytechnic's Final Year Project solution (HTML/CSS/JS), improving client processes by ~25%.
- Developed, ideated & integrated reusable Next.js profile cards for Autodesk using TypeScript, improving interface efficiency by ~30%. (Github Link)

Leaptron Engineering Pte. Ltd.

Feb 2021 - Aug 2021

Software Engineer (Internship)

Singapore

- Engineered & deployed Android applications (Java) for QR code & object scanning, increasing productivity by ~40%.
- Developed & enhanced C# applications to optimize core logistical functions, improving application efficiency and performance by ~30%.
- Optimized backend system efficiency by debugging Node.js servers and refining MySQL Stored Procedures, enhancing support for 20+ factory staff.
- Accelerated warehouse operations by developing applications via AppGyver (now SAP Build Apps), applying UI/UX principles for design and integrating with Node.js servers, boosting workflow produtivity by ~60%.

PERSONAL PROJECTS

CellCollab (React.js, Node.js) | Web Link | Github Link

- Engineered a real-time, multiplayer Conway's Game of Life sandbox featuring WebSocket-based room synchronization and collaborative editing capabilities.
- Simultaneously deployed using React.js for a responsive frontend and hosted on Heroku for backend functionalities.

pySquidGame (Python, Pygame) | Github Link

- Developed an interactive Squid Game-inspired application featuring all six main games with accurate mechanics and progressively challenging gameplay.
- Implemented Object-Oriented Design (OOD) to create a scalable stage-based architecture and animated UI/UX using Python and Pygame.

Astertris (Java) | Github Link

- Designed and implemented a space-themed Tetris variant involving custom radial gravity mechanics around an asteroid and advanced collision handling for progressively challenging gameplay.
- Built a seamless and intuitive UI & application logic using Java and the Java Swing framework.
- Optimized in-game functionalities & logic by leveraging appropriate data structures for efficient performance.

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