

## Software Engineer

Experienced in building interactive and scalable applications in both agile product teams and indie environments. Passionate about solving **technical challenges** and delivering **efficient, maintainable** code. Seeking a role that fosters **continuous learning**, and provides opportunities to contribute and grow alongside the team and company.

**Expertise** C++/C | Next.js | TypeScript | HTML/CSS/Tailwind | JavaScript | Cloudflare | SQL



## Work Experience

2024  
–  
2025

### SolanaFM (Acquired by Jupiter Exchange)

Software Engineer Intern | Frontend & Backend

- Design and develop maintainable and reliable responsive web applications using Next.js
- Delivers polished site interface with improved SEO rankings and social media visibility
- Design dynamic DB database structure for efficient storage and retrieval of data with Cloudflare and RESTful APIs
- Implement data compression and parsing for data integrity, and middleware for protected user endpoints
- Create interactive interfaces for developers to test API endpoints and view parameters in real time with Swagger UI
- Implement Discord Webhooks for GitHub Notifications to streamline update tracking within the team
- Work with UI/UX designers on tight deadlines for iterative changes and timely delivery
- Utilises AGILE methodology and GitHub to collaboratively develop code and track progress in a large team

2019  
–  
2021

### A&C Atelier Pte Ltd

UX Developer | Frontend

- Design and implement interactive UX experiences for client projects
- Develop with mobile-first approach and cross-browser testing with different platforms
- Average Google PageSpeed of >65-80 for mobile and >90 for desktop
- Pixel perfect quality for front-end development, and passing the penetration test in 2 tries
- Build responsive e-commerce site with WordPress CMS



## Projects

### Custom 2D Game Engine

*Skills | C++ · OOP · Engine Development · Project Management*

- Developed scripting system with Mono to allow designers to rapidly prototype gameplay features
- Built debugging tools for memory checks, profiling, and crash reporting, improving team productivity
- Implemented gameplay mechanics, such as character animations with sprite sheets and AI behaviors

### 2D Strategic Platformer

*Skills | C++ · UI Development · Game Development*

- Implemented core gameplay mechanics, such as player controls, environment interactions, and win/lose conditions
- Developed power-up systems to enhance player strategy
- Built modular UI system (menus, HUD, interaction prompts)

### Custom 3D Game Engine

*Skills | C++ · FMOD · Game Systems Development*

- Built event-driven audio system including live voice chat and spatial audio
- Implemented dynamic audio filters and effects such as reverb to enhance gameplay immersion
- Focused on real-time system performance in a multiplayer setting

### 2D Tile-Based Puzzle Game

*Skills | C · Project Management · Game Development*

- Implemented enemy AI with A\* pathfinding and decision-making logic
- Implemented core gameplay mechanics, such as map generation and collision detection



## Education

2021 – 2025

Bachelor of Science with Honours

Computer Science in Interactive Media & Game Development

DigiPen Institute of Technology Singapore