Ian Wang

ianwang.info
ianwang8585
ian8585.itch.io
+1(647)893-9024
ian980728@gmail.com

BA (Hons.) in Digital Media Game Arts, York University 2019 - 2022

Diploma in Interactive Media Design, Seneca College 2017 - 2019

Work Experience

Software Developer - Full-time | Tigercat Industries Inc. | ***Tigercat Forestry Simulator*** | Cambridge, ON May 2023 - Sep 2025

- Implemented simulation features using Unity (C#) and Vortex Studio (C++ & Python) for realistic forestry machine behavior
- Developed security features including licensing systems, data/code encryption, and modular plugin (.DLL) architecture
- Optimized runtime performance in large-scale environments by resolving CPU/GPU bottlenecks
- Enhanced memory management and loading performance using the Addressables system
- Built custom Unity Editor tools to automate workflows and streamline content integration
- Designed and integrated backend database using MySQL and Apache
- Built dynamic environment systems including weather, day-night cycles, and AI-driven animal behaviors (BOIDS & FSM)
- Created custom URP shaders (Shader Graph & HLSL) for visual features such as skybox blending, LOD crossfading
- Designed and implemented UI systems (HMI & HUD) with a focus on usability, clarity and user experience
- Collaborated across teams to maintain scalable project architecture and stable releases
- Created and maintained technical documentation and user guides

Unity Gameplay Programmer - Contract | Visualhawk Studio | ***VR Puzzle Game - Scotty*** | Toronto, ON Jun 2022 - Mar 2023

- Developed gameplay systems in Unity (C#), including quest systems, player input, locomotion, and camera control
- Collaborated with designers and artists to define requirements and iteratively build solutions
- Optimized AI and pathfinding systems to improve code efficiency and AI behavior accuracy
- Identified potential risks and communicated updates to technical leadership
- Conducted testing and debugging prior to release

Unreal Developer - Freelance | OYA Black Arts Coalition | ***OYA Scale Up Immersive*** | Toronto, ON Dec 2022 - Mar 2023

- Collaborated with artists and production companies to convert their creative ideas to environmental concept art in Unreal Engine

Additional Experience

Lead Graphic Designer | York University Digital Media Student Association | Toronto, ON Dec 2020 - Apr 2022

- Designed digital assets for promoting events, campaigns, and workshops. Acted as a liaison between students and school faculties

Artist Assistant | The Bentway Toronto | ***Pulse Topology*** | Toronto, ON Sep 2021 - Oct 2021

- Provided on-site assistance with the installation of the artwork Pulse Topology at the Toronto Exhibition Place

Side Projects

Solo-dev | ***Souls-like Action RPG - Neon Flash*** | Unreal Engine 5 Aug 2022 - Sep 2023

- Designed and developed a Souls-like ARPG with a custom melee combat system
- Implemented core gameplay systems including combat logic, enemy AI, and player progression

Lead Programmer | ***Chaotic Crossing Guard Game - Traffic Jam*** | Unity Jan 2022 - Apr 2022

- Led the team implementing the core gameplay features. Created a dynamic and interactive traffic AI system