ANSON NG

+1 (437) 661-0884 | Toronto, Ontario, Canada

Email: [ngkawai9886@gmail.com](mailto:ngkawai9886@gmail.com) | Portfolio: [ansonngg.github.io](https://ansonngg.github.io/) | GitHub: [ansonngg](https://github.com/ansonngg) | LinkedIn: [anson-ng-11145b206](https://www.linkedin.com/in/anson-ng-11145b206/)

Enthusiastic game developer experienced in working on “Tower of Saviors”, a long-standing game with an extensive codebase. Possessing a strong mathematical aptitude and proficiency in linear algebra, data structures and computer graphics. Seeking diverse technical positions in game development to gain varied experiences. Open to participating in game development or contributing to the creation of internal tools such as game engines.

**SKILLS**

**Programming** C/C++, C#, Java, JavaScript, Python

**APIs/Libraries** DirectX 12 & HLSL, OpenGL & GLSL, Open3D, OpenCV, OpenMP, PyTorch, Qt, React

**Software/Tools** Unity, Unreal Engine, CMake, Git, Jira, Jenkins, Figma, Photoshop

**Backend** Node.js, MongoDB, MySQL

**WORK EXPERIENCE**

**Mad Head App Limited**

*Programmer Jun 2022 – Jun 2023*

* Maintained and brought new features into the game “Tower of Saviors” using Unity and C#
* Collaborated closely with game designers and artists to deliver new, high-quality game levels/art assets
* Collaborated closely with QA testers to enhance quality assurance by implementing unit tests and employing effective debugging techniques, leading to a notable 35% reduction in weekly bug reports
* Provided code architecture suggestions to senior developers and implemented impactful revamps, resulting in expedited development of new features

**Hong Kong Centre for Logistics Robotics Limited**

*Assistant Engineer**Aug 2021 - Jun 2022*

* Developed a computationally heavy software by using C++ and various libraries such as Open3D and OpenCV
* Designed and implemented the GUI of the software using Qt, and integrated them with backend modules
* Implemented and optimized geometric algorithms provided by researchers, employing techniques such as multithreading and optimizing time complexity, resulting in a performance improvement of 500%

**PROJECTS**

**Tower of Saviors** *Professional Project*

* A mobile puzzle RPG developed by Mad Head App Limited, which is popular in APAC
* I implemented gameplay content followed by unit tests, designed UIs for them, and created visual effects
* The visual effects were made by utilizing resources provided by artists, particle systems and writing shaders
* I also undertook code architecture revamps to facilitate easier development, maintenance, and broader support for features

**Operation: Apocalypse** *School Project*

* A 3D first-person shooter PC game created by a group of three individuals, featuring various weapons for players to collect and use
* Has only one but complete level with boss fight at the end
* I designed and constructed the level, implemented UIs, and provided coding support

**Visiting the Alien** *School Project*

* A mini game written in C++ with OpenGL that controls a spacecraft to visit aliens
* Contains several techniques such as light rendering, normal mapping, object instancing, etc.
* The light rendering follows the Phong illumination model

**EDUCATION**

**The Chinese University of Hong Kong**

*Bachelor of Science in Mathematics Sep 2017 – Jul 2021*

Stream: Enrichment Stream and Computational and Applied Mathematics Stream

Minors: Computer Science, Japanese Language