KA WAI NG

(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 who had worked on “Tower of Saviors”, a game published for over 10 years with large codebase. Equipped with strong mathematical ability and proficient in linear algebra, numerical analysis, data structures and computer graphics. Seeking to try out any technical positions in game development to gain different kinds of experience. Willing to participate in development of games from indie to AAA-titled.

**SKILLS**

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

**API/Library** Node.js, OpenGL (GLSL), Open3D, OpenMP, PyTorch, Qt, React

**Software/Tool** Figma, Jenkins, Jira, MongoDB, MySQL, Photoshop, Unity, Unreal Engine

**Languages** Cantonese (Native), English (Proficient), Mandarin (Proficient), Japanese (Intermediate)

**WORK EXPERIENCE**

**Mad Head App Limited** Hong Kong

*Programmer Jun 2022 – Jun 2023*

* Maintained and brought new features into the game “Tower of Saviors” using Unity and C#
* Designed visual effects by using resources from Art Team, writing shaders and utilizing particle system
* Implemented the logic and designed the UI for gameplay to make new contents live in the game
* Revamped legacy code into code that fits the current architecture for smoother development

**Hong Kong Centre for Logistics Robotics** Hong Kong

*Assistant Engineer**Aug 2021 - Jun 2022*

* Assisted the Project Manager to develop a computationally heavy software by using C++ and multithreading
* Designed and implemented the GUI of the software and integrated them with backend modules
* Implemented and optimized geometric algorithms given by researchers and modified them when necessary
* Applied deep learning to solve geometric problems

**PROJECTS**

**Tower of Saviors** *Professional Project*

* A mobile puzzle RPG developed by Mad Head App Limited, which is popular in Hong Kong and Taiwan
* My job was to implement some gameplay logic and design their UIs when necessary, as well as to design some visual effects
* Sometimes I helped to revamp the structure of part of the code for easier maintenance and wider support for features

**Operation: Apocalypse** *Personal Project*

* A 3D first-person shooter computer game made by a group of three people with Unity
* Has only one but complete level with boss fight at the end
* Has a variety of weapons and items for players to collect and use
* My job was to design and construct the level and some of the UIs, as well as some coding support

**Visiting the Alien** *Personal 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** 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