IAN CI-HIN SHUM

Singapore | +65 9812 3424 | ianshum98@gmail.com | ianshum.github.io | linkedin.com/in/ianshum

Software Engineer

Skilled Software Engineer with 3 years of experience innovating and implementing technical solutions across diverse projects. Consistently identifying technical gaps and delivering tailored resolutions to address technological needs of companies. Proven track record in developing new features in Unity and collaborating with cross-functional team to elevate gameplay experience of a mobile RPG game.

WORK EXPERIENCE

Software Engineer (Contract)
NCS Pte Ltd

November 2023 – Present
Singapore

- Contracted via PERSOLKELLY Singapore Pte Ltd.
- Developed back-end application service for a new feature, integrating it with 5 existing modules and achieving a 100% workflow in accordance with users' expectations.
- Diagnosed and optimized various issues stemming from an existing module, resulting in 10% increase of code quality and 70% decrease in related bug counts.

Junior Software Engineer
XII Braves Pte Ltd

November 2022 – June 2023
Singapore

- Developed game user interfaces and menus in Unity for a mobile RPG game (Valiant Force II), resulting in a better game experience.
- Collaborated with other developers, designers, and artists to overhaul an existing game feature, achieving 50% increase in code quality and up to 80% flexibility to support future changes.
- Implemented several quality-of-life changes that received positive feedback from players.
- Debugged game codes during pre-release phase of game updates, resulting in a 70% clearance rate of defects and a smoother user experience.
- Took part in midnight and weekend support team, ensuring an uninterrupted gameplay for players.

Solution Consultant
Fusionex Group

January 2021 – June 2022
Malaysia

- Developed 40% of the code base for back-end service and front-end user interface of a loaning system, and consistently performed code optimization to increase performance by at least 20%.
- Implemented various features proposed by business users, integrated, and fully tested them resulting in a 100% workflow across client portals and admin portals.
- Delivered and fully integrated a customized client portal with aggressive development timeline.

Program Manager Coordinator (Intern)
Roche (Malaysia) Sdn Bhd

January 2020 – March 2020
Malaysia

- Actively liaised with global business executives, identifying key-high level business values, and obtaining insights into improvement of a developing health program.
- Setup a preliminary website to provide timely updates of the program.
- Prepared slide-packs and initial business case document for high-level project management team.

PERSONAL PROJECTS

Game Developer, Game Designer
January 2023 – Present

Skirmish (Mobile)

- Designed an automated turn-based mobile game as part of a two-person team.
- Decided on the code structure for the code base and developed 80% of them, including database integration, user interface system and battle system.
- Streamlined game development process by creating a dedicated python program in generating codes based on an excel sheet containing game data, resulting in an increase in productivity.
- Documented and maintained game design documentation, ensuring concise understanding among team members during feature development.
- Researched multiple solutions to tackle back-end development and game asset preparation.

Indie Game Developer
July 2022 – October 2022

First PRG Game (Learning Project)

- GitHub Link: https://github.com/ianshum/P_01_Pixel_TopDown_RPG
- Involved in the full process of making a top-down RPG game in pixel graphics, designed with a custom combat system revolving around attack range, buffs, weapons and armor.
- Animated all melee ranged and long ranged enemies with custom attack animations.
- Developed and fined-tuned experience and gold system for a better player progression experience.
- Worked on various user interfaces and custom maps for smooth gameplay.

EDUCATION

University of Wollongong, Australia
July 2017 – July 2020

Bachelor of Computer Science (Major in Software Engineering)

- Graduated with Weighted Average Mark of 86.54% (Distinction / First Class Honour Equivalent)
- Academic awards: Most Innovative Student Award (2020), Dean's Merit Award (2017, 2019, 2020)
- Subjects: Interactive Computer Graphics, 3D Modelling and Animation, GPU Programming

SMJK Sam Tet, Ipoh, Perak, Malaysia
March 2016

Sijil Pelajaran Malaysia (SPM)

- 10As (8A+, 1A, 1A-) including A+ in Advanced Mathematics and Physics

SKILLS

Languages	Mandarin, Cantonese, English, Malay
Programming Language	C#, Python, Typescript, JavaScript, SQL, HTML, CSS, C++
Framework	.NET Framework, Angular, EF Core
Software Application	Visual Studio, Unity, Microsoft SQL Server, MySQL Workbench
Version Control	Git

REFERENCES

Kevin Tan
Senior Unity Engineer at IGG
kangrui10@hotmail.com

Yunxu Chen
Technical Lead at Century Games
cyunxu@gmail.com