

Carter (Po-Chung) Yang

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SELECTED ACADEMIC PROJECTS

Programming Educational Game "Robot Farm"

Full Stack Web Developer, Team of 3, JavaScript
02/2014 – 07/2016

- This project was presented in [ACTC 2015](#).
- Educated over 600 students and still on track in Yuan Ze University.
- Developed the block-based coding system without any frameworks.
- Deployed the server and database for teachers to create custom stages.
- Implemented logging system to record player actions during gameplay process.

2D Action Platformer Game "Towncount"

Game Programmer, Team of 6, Unity
10/2016 – 06/2017

- Developed Animation System, Scene Manager and Physics Engine from scratch.
- Built various systems including skill tree, rope physics, dynamic map, save & load system.
- Designed 3 challenging bosses with varied attacks and movements.

Casual Mobile Game "Ring React"

Solo, Unity
07/2018 – 09/2018

- Monetized with the Google Play's Payment system and Advertisement service.
- Provided the Ranking and Achievement system for players to compete with each other.
- Published the game on Google Play, and made over 100 stages.

Browser Game "Fate Maker"

Solo, JavaScript
12/2015

- Built the game creation system for players to create custom stages.
- Programmed Animation System and Physics Engine without game engine frameworks.
- Implemented the server and database for players to publish those levels worldwide.

WORK EXPERIENCE

IT Engineer, Tokyo Marine Newa Insurance, Taiwan

Full Stack Web Developer
10/2017 – 07/2018

- Developed many Workflow Management Systems with ASP.NET MVC, such as absent note.
- Maintained insurance websites and fixed front-end security problems (CSRF, XSS, etc.).
- Volunteered to help colleagues that are struggling with programming tasks.

IT Engineer Internship, Move In Pocket Co. Ltd., Taiwan

Game and Full Stack Web Developer
08/2016 – 03/2017

- Implemented API services for cabin attendants in EVA Air.
- Developed and released 4 games on Google Play, and embedded Alipay payment API.
- Guided peers to build the managed service for Taiwan government employees.

Research Assistant, Yuan-Ze University, Taiwan

Full Stack Web Developer
02/2014 – 07/2016

- Built the programming educational game called "Robot Farm".
- Analyzed playtest data and arranged levels to improve programming learning progress.

EDUCATION

Yuan-Ze University, Taiwan

Bachelor of Science in Information Communication
09/2013 – 06/2017

- GPA: 3.85 / 4.0; ranked 2 / 56 in the class.
- Relevant Coursework: Game Development, Interactive Computer Graphics, Internet Programming, Mobile Device Programming, Windows Programming, Web Programming, Database System.

SKILLS

Game Development: Unity, OpenGL, Script Optimization (Reduce GC Alloc, etc.), Engine Development.
Cyber Security: CTF, Reverse Engineering, Network Security, Game Security, GDB, IDA Pro, Cheat Engine.
Programming Language: C#, C/C++, Python, Assembly, Golang, Typescript, JavaScript, ASP.NET, Objective-C.
Language: English, Chinese, Japanese.
Other: Digital drawing, Linux/Unix Administration, AI Development, MSSQL, WinAPI.

ACTIVITIES

Google CTF 2020

08/2020

- Solved 2 reversing engineering problems, and 2 web problems.

PicoCTF 2019

10/2019

- Got into the top 90 Global Rankings before the event ended.