# Carter (Po-Chung) Yang

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#### SELECTED ACADEMIC PROJECTS

#### **Programming Educational Game "Robot Farm"**

Full Stack Web Developer, Team of 3, JavaScript

- This project was presented in <u>ACTC 2015</u>.

02/2014 - 07/2016

- Developed the Block-based coding system without any frameworks.
- Established the server and database for teachers to make their stages.
- Introduced the statistical analysis for teachers to check their students' shortage.

# 2D Action Game "Towncount"

Game Programmer, Team of 6, Unity

- Developed my own Animation System, Scene Manager and Physics Engine.

10/2016 - 06/2017

Built the whole system including Skill Tree, Drag System, Map, Save & Load system.

# Casual Mobile Game "Ring React"

Solo, Unity

- Monetized with the Google Play's Payment system and Advertisement service.

07/2018 - 09/2018

- 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

- Built the game creation system for players to create their own custom stages.

12/2015

- Programmed my own Animation System and Physics Engine without game engine frameworks.
- Implemented the server and database for players to publish those courses worldwide.

# **WORK EXPERIENCE**

### IT Engineer, Tokyo Marine Newa Insurance, Taiwan

Full Stack Web Developer

- Developed many Workflow Management Systems with ASP.NET MVC, such as absent note.

10/2017 - 07/2018

- 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

- Implemented API services for cabin attendants in EVA Air.

08/2016 - 03/2017

- 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

Built the programming educational game called "Robot Farm".

02/2014 - 07/2016

Analyzed playtest data and arranged levels to improve programming learning progress.

# **EDUCATION**

## Yuan-Ze University, Taiwan

Bachelor of Science in Information Communication

- GPA: 3.85 / 4.0; ranked 2 / 56 in the class.

09/2013 - 06/2017

- 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**

PicoCTF 2019 10/2019

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

Google CTF 2020 08/2020

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