# Carter (Po-Chung) Yang

E-mail: lychnussys@gmail.com Portfolio: https://rachione.github.io/Portfolio

Github: <a href="https://github.com/rachione">https://github.com/rachione</a> Linkedin: <a href="https://www.linkedin.com/in/carter-yang-8546b5201/">https://github.com/rachione</a> Linkedin: <a href="https://www.linkedin.com/in/carter-yang-8546b5201/">https://www.linkedin.com/in/carter-yang-8546b5201/</a>

## SELECTED ACADEMIC PROJECTS

### 3D Narrative Game "Vertical Slice"

Gameplay Engineer, Team of 8, Unity

- Created a finite-state machine to manage player and dialogue status.

10/2020 - 03/2021

Developed a data prefab generator and a custom inspector for collaborators to adjust game parameters.

- Designed and developed an event trigger system with high scalability using interfaces and inheritances.

## Casual Mobile Game "Ring React"

Solo, Unity

- Monetized with Google Play's payment system and advertisement service.

07/2018 - 10/2018

- Provided the ranking and achievement system for players to compete with each other.

- Published the game on Google Play and made over 100 stages.

## 2D Action Platformer Game "Towncount"

Game Programmer, Team of 6, Unity

- Developed animation system, scene manager, and physics engine from scratch.

10/2016 - 06/2017

- Built various systems including skill tree, rope physics, dynamic map, save & load system.

- Designed 3 challenging bosses with varied attacks and movements.

## **WORK EXPERIENCE**

#### IT Engineer, National Chengchi University, Taiwan

Full-Stack Web Developer

- Develop Productivity Decision-making System for manufacturing management.

06/2021 – present

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

Full-Stack Web Developer

- Developed many workflow management systems with ASP.NET MVC, such as the absent note. 10/2017 – 05/2018

- 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

- Built various systems including block-based coding system, logging system, server, and database.

- This project was presented in ACTC 2015. Educated over 200 students, and is still on track in Yuan Ze University.

### **EDUCATION**

# **New York University**

Master of Science in Computer Engineering

Relevant Coursework: Machine Learning, Internet Architecture & Protocols

09/2021 - present

## 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, Japanese, Chinese.

Other: Digital Drawing, Code Refactoring, Linux/Unix Administration, AI Development, MSSQL,

Firebase, OpenCV, WinAPI, Jira, Github.

### **CERTIFICATIONS**

## **Data Science Bootcamp Certificate**

07/2021

### **ACTIVITIES**

PicoCTF 2019 10/2019

Got into the top 90 global rankings before the event ended.