

# Carter (Po-Chung) Yang

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Github: <https://github.com/rachione> Portfolio: <https://rachione.github.io/Portfolio>

## WORK EXPERIENCE

- Full-Stack Web Developer, National Chengchi University, Taiwan** 06/2021 – 09/2021
- Developed Productivity Decision-making System for manufacturing management.
  - Used D3.js to generate interactable charts for product reports.
- Full-Stack Web Developer, Tokio Marine Newa Insurance, Taiwan** 10/2017 – 05/2018
- Developed many workflow management systems with ASP.NET MVC, such as the absent note.
  - Maintained insurance websites and fixed front-end security problems (CSRF, XSS, etc.).
  - Volunteered to help colleagues that are struggling with programming tasks.
- Full-Stack Web Developer Internship, Move In Pocket, Taiwan** 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** 02/2014 – 07/2016
- Built the programming educational game called “[Robot Farm](#)” from scratch with JavaScript.
  - 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.

## ACADEMIC PROJECTS

- [3D Narrative Game "Vertical Slice"](#)** Gameplay Engineer, Team of 8, Unity 10/2020 - 03/2021
- Created a finite-state machine to manage player and dialogue status.
  - Developed a data prefab generator and a customized 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 07/2018 – 10/2018
- Monetized with 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.
- [2D Action Platformer Game "Towncount"](#)** Gameplay Engineer, 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.

## EDUCATION

- New York University, United States** Master of Science in Computer Engineering 09/2021 – present  
Relevant Coursework: Machine Learning, Internet Architecture & Protocols
- 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

- Web Development:** Angular (2+), Node.JS, D3.js, jQuery, ASP.NET, MSSQL, Firebase
- Game Development:** Unity, OpenGL, Engine Development.
- Cyber Security:** CTF, Reverse Engineering, Network Security, Game Security, GDB, IDA Pro, Cheat Engine.
- Coding Language:** C#, C/C++, Python, Assembly, Golang, Typescript, JavaScript, Objective-C.
- Language:** English (Fluent), Chinese (Native), Japanese (Intermediate).
- Other:** Adobe Photoshop, PaintTool SAI, Linux/Unix, Machine Learning, OpenCV, WinAPI, Git

## CERTIFICATIONS

- [Data Science Bootcamp Certificate](#)** 07/2021

## ACTIVITIES

- PicoCTF 2019** (Rank 90) 10/2019
- Google CTF 2020** (Beginner challenge all solved) 08/2020