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 using AngularJS.
- Modularized interactable charts for product reports using D3.js.
- Applied CSV processing and Data Wrangling using Pandas in Python.

Full-Stack Web Developer, Tokio Marine Newa Insurance, Taiwan   10/2017 - 05/2018
- Developed several workflow systems with ASP.NET MVC for insurance and human resource management.
- Maintained insurance websites and fixed many web security vulnerabilities (CSRF, XSS, etc.).

Full-Stack Web Developer Internship, Move In Pocket, Taiwan   08/2016 - 03/2017
- Implemented API services for cabin attendants in EVA Air using C#.
- Developed and released 4 games on Google Play, and added payment services with Alipay APIs.
- Guided peers to build the managed service for Taiwan Government.

Research Assistant, Yuan-Ze University, Taiwan   02/2014 - 07/2016
- Built the educational programming game called "Robot Farm" from scratch with native JavaScript.
- Developed block-based programming system, web server, database, and interactive animations.
- This project was presented at the conference called ACTC 2015. Educated over 500 students.

ACADEMIC PROJECTS

Thesis: "Understanding Why ViT Doesn't Perform Well on Small Datasets: An Intuitive Perspective"
- Trained ViT and ResNet18 models on CIFAR-10, CIFAR-100, and SVHN datasets using PyTorch.   02/2022 - 05/2022
- Applied wandb (Weights and Biases) library to track and visualize the accuracy.
- Created a Deep Learning environment using Singularity and Conda on the HPC clusters.

Narrative Game "Vertical Slice", University of California, Santa Cruz   Gameplay Engineer, Team of 8, C#
- Built a polymorphic finite-state machine to manage player status using C#.   10/2020 - 03/2021
- Developed data prefab generators and customized inspectors for collaborators to adjust game parameters.
- Modularized Event Triggers 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 competition.
- Published the game on Google Play with over 100 stages.

EDUCATION

New York University, United States   Master of Science in Computer Engineering
- Honors & Awards: Grad School of Engineering Scholarship. GPA: 3.8 / 4.0.   09/2021 - 05/2023
- Relevant Coursework: Machine Learning, Deep Learning, Digital Signal Processing, Internet Architecture & Protocols, Operating Systems.

Yuan-Ze University, Taiwan   Bachelor of Science in Information Communication
- Cumulative GPA: 3.9 / 4.0   09/2013 - 06/2017
- 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, Firebase, Flask, Chrome Extension.
Cyber Security: CTF, Reverse Engineering, Web Security, Win32, IDA Pro, Game Cheats.
Coding Language: C/C++, C#, Python, JavaScript, Typescript, Assembly, MATLAB.
Language: English (Fluent), Japanese (Fluent), Chinese (Native).
Other: Unity, OpenGL, OpenCV, Linux/Unix, PyTorch, Embedded System, Digital Drawing.

CERTIFICATIONS

Data Science Bootcamp Certificate   07/2021

ACTIVITIES

PicoCTF 2019 (Global Rank 90)   10/2019

Google CTF 2020   08/2020