Ryan Chu

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EDUCATION

Northwestern University   Evanston, IL; Expected Jan 2025

Masters of Science in Computer Science, GPA: 4.0

Relevant Courses: Deep Learning, Scalable Systems Architecture (AWS), Competitive Programming, Intro to Networks, Advanced
       Cryptography, Multicore Concurrent Programming, Digital Forensics Incident Response, Intro to Blockchains

National ChengChi University   Taipei, Taiwan; Graduated June.2022

Bachelors of Science in Computer Science

SKILLS

C/C++, Python, SQL, Java, Javascript, C# .NET,, HTML/CSS, NodeJS, R, Restful API, Visual Studio, AWS EC2, EB, RDS,
Lambda, Ajax, React, DevOps CI/CD, CMake, Docker, Kubernetes

RELEVANT EXPERIENCE

AIX:, *Software Engineer*   Evanston, IL; August 2023 - Present
- Manages a team of SWE interns at Northwestern to go through software engineering cases, with plans of rapid expansion and recruiting sales managers and more interns in the future.
- Developed a fullstack automatic truck dispensary solution for Burnsed Including setting up AWS servers, databases, and lambdas. Backend and frontend development with Flask Ajax, React, Vue.
- Worked with Github and other workflow practices for CI/CD Docker deployment for AWS auto lambda deployment and maintenance.
- Worked with Azure AD, Microsoft Graph API and Google Cloud to build OAuth SSN solutions.

Spacebrainz, *Machine Learning Consultant*   Singapore/Remote; July 2022 - January 2023
- Worked with developers to incorporate Stable-Diffusion into a next-gen VR video game system, with the goal being to embed or rewrite stable diffusion, a deep learning architecture in c++.
- Developed AI pipeline for stable-diffusion, ESRGAN upscaling and depth perception using python libraries. Code traced CompVis's open source stable diffusion source code.
- Supported team members in C++/Libtorch migrations.

DoubleThink Lab, *Research Assistant*   Taipei, Taiwan; July 2022 - January 2023
- Worked with criminal law professors and machine learning scientists to identify and counter cybersecurity attacks and misinformation campaigns.
- Crawled and analyzed Taiwanese Yahoo News using Beautiful Soup, conducted exploratory data analysis, and held weekly meetings to strategize upcoming issues.
- Analyze Weibo news for interference using reinforcement learning methods such as KSC clustering algorithms.

Genius Vision Digital, *Software Engineering Intern*   Taipei, Taiwan; June 2019 - May 2022
- Led the development of the GVD 4.0 Licensing System. Rsa public/private key encryption, backend C++ development, and NodeJS web services that automates license generation, and auto-deployment using Ansible.
- Oversaw development of C# .NET data visualization software that utilizes elasticsearch engine to display various information using Microsoft WPF and graphing tools such as telerik.
- Led the migration to cloud virtualization of company solutions using Azure web services. Utilizing Azure DevOps, container deployment and Azure VPN.

NCCU, *Computer Science Summer Camp Instructor*
- Helped develop curriculum for introductory programming using Unity.
- Gave introduction for class of 30 high schoolers on Unity engine, and walked through C# scripting for video game logic.

RESEARCH EXPERIENCE

Capstone Project: Understanding Echo Chambers on Social Media   NCCU; 2019-2022
- Using graph similarity algorithms to measure subreddits of different states and their political leanings. Comparing results to the presidential elections to see if swing states show political shift.
- Crawling and deciphering data from Reddit API services, and finding seed communities to base user activity on.

LANGUAGES & HONORS

Native Languages: English, Traditional Chinese

3rd Place - NU WildCat Fresh Hacks (2023)

Preliminary Award - Careerhack TSMC x Microsoft Taiwan Corporation (2022)