

Kayan Shih

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EDUCATION

Brown University

Master of Science in Computer Science

September 2023 – Expected May 2025

Providence, RI

- **Relevant Coursework:** Computer Networks, Computational Linguistics

New York University

Bachelor of Arts in Computer Science

GPA: 3.7/4.0

September 2019 – May 2023

New York, NY

- **Relevant Coursework:** Operating System, Database, Computer System Organization, Machine Learning and Deep Learning, Responsible Data Science, Algorithm, Data Structure
- **Honor:** Dean's list 2019 & 2021

PROFESSIONAL EXPERIENCE

SlowMist

Smart Contract Security Audit Intern

June – July 2023

Xiamen, China

- Conducted code review for multiple token projects in **Solidity**, and collaborated with development teams to identify vulnerabilities with vaults and vesting mechanisms under **Agile** methodology.
- Obtained expertise in Ethereum infrastructure, smart contract principles, and acquired in-depth knowledge of token issuance protocols, including ERC20, ERC721, and ERC1155, and their specific use cases.
- Familiarized with decentralized finance (DeFi) products and NFT applications, and mastered the use of wallets, exchanges, and decentralized applications (dApps).

Tencent

Game Operation Intern

May – August 2021

Shenzhen, China

- Implemented strategies to increase **66K** daily active user in the game "Dragon Raja" by **3.5%** through a successful promotion event, which prevented user loss caused by the new season of the top popular game "Honor of Kings."
- Analyzed a competing product "Genshin Impact" and provided insights for cross-functional teams to conduct overseas marketing strategies for future products.

PROJECT EXPERIENCE

Fingertip Position Estimation of a Robot Hand

New York University

November – December 2022

New York, NY

- Constructed a ResNet34-based neural network to infer robot fingertip positions from RGB & Depth images using **PyTorch**.
- Designed and built a data pipeline with **Dataset and DataLoader modules in Pytorch** and Performed image cropping, color normalization, and color jittering to augment images in training set to mitigate overfitting.
- Trained ResNet34-based model with Adam optimizer under supervised learning setting and reached **root mean square error of 0.00759** for fingertip position estimation on the test set.

University Course Registration System

New York University

January– February 2021

New York, NY

- Utilized **Java** to design a University Course Registration System using the Object-Oriented Programming Paradigm and **received a top 10% ranking among 80 students**.
- Developed a login system to grant administrative permissions to admin users and avoid cross-user course registrations.
- Defined user interfaces for admin users and student users for course modifications and course registrations.
- Tracked new courses or modifications of course information with a neat database based on CSV files.

SOFTWARE AND LANGUAGE SKILLS

Programming Language: Python, Java, SQL, C, Go, Solidity, MySQL, PostgreSQL

Applications: Docker, WireShark, MongoDB, MATLAB, Tableau