Danny Kuo

Software Engineer Intern

Education

Carnegie Mellon University, Entertainment Technology Center (ETC)	Sep. 2019 - May 2021
Master of Entertainment Technology	Pittsburgh, PA
National Taiwan University	Sep. 2016 - Jan. 2019
Master of Business Administration, Finance Major, Total GPA: 3.83/4.3	Taipei, Taiwan
National Cheng-Chi University	Sep. 2011 - Jan. 2016
Bachelor of Science, Risk Management and Insurance Major, Last 60 Credits GPA 4.0/4.0	Taipei, Taiwan
Relevant Courses: Java for Application Programmers, Algorithms, Data Structures and Algorithms, O	Computer Networks, Computer
Programming, Discrete Mathematics, Statistics	

Skills

- Game: C#, C++, Unity, Cocos, ARCore, Valve Index; Frontend: HTML5, CSS, JavaScript;
- Deep Learning: Python, Keras, PyTorch, Tensorflow, Microsoft Azure; Network/backend: Java, Socket Programming, TCP
- Version Control and System: Perforce, Git, Github, Linux
- Languages: English (fluent), Mandarin (native), Taiwanese (native), Russian (basic)

Applications / Projects

Neo Security Lab

Programmer, ETC and Software Engineering Institute at CMU

- Created a web-based engaging and stimulating game by Cocos and JavaScript that will test adult's degree of trust for AI system
- Collected tester's data based on their choices in various game scenarios for AI research in the future

Building Virtual Worlds

Programmer/Sound Designer, ETC

- Built interactive virtual worlds with four other students from various art, sound, and programming disciplines on rotating teams, creating five mini-games or experiences over the course of the semester
- Used Unity, HTC Vive, Magic Leap, Kinect, and Valve Index VR headsets as game platforms to implement 3D game projects
- Communicated with teammates to ensure quality and great player experience through playtesting and iterative redesign

Mahjong Mentor

Programmer/Designer, Institute for Information Industry

- Collaborated with a team of 4 to develop an app on AR glasses, guiding players to identify cards and make intelligent decisions •
- Created machine learning models in Python utilizing Azure Custom Vision service; analyzed multiple strategies to train images, including object detection and multiclass image classification
- Presented our project through a video and a pitch on the final competition, winning four top awards over 350 competitors

Experience

Research Assistant

Artificial Intelligence in Products Engineered for X (AiPEX) Lab, CMU

- Developed a virtual simulation world by Unity to experiment whether layout differences in the supermarket affect profits •
- Cooperated with 8 teammates to set up and simulate an autonomous vehicle environment

Research Assistant

Multimedia Technologies Laboratory, Academia Sinica

- Compressed ResNet50 model to one-fourth of the size; made deep learning model faster on embedded devices •
- . Improved image classification test accuracy rate by knowledge distillation using Keras for more than 1%

Taipei, Taiwan

Jan. 2019 - June 2019 Taipei, Taiwan

Jan. 2020 - Present

Pittsburgh, PA

Sep. 2019 - Jan. 2020 Pittsburgh, PA

June 2018 - Dec. 2018

Jan. 2020 - Present

Pittsburgh, PA