

YuTing Yen

☎ 0958-507-568 | ✉ jj861119@gmail.com

Education

National Taiwan University of Science and Technology

MASTER OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.95/4.3

2020.9 ~2022.8

- Thesis topic — Learning-based Game Card Watermarking System Integrated with Human Visual Perception
- TOEIC 925

National Taiwan University of Science and Technology

BACHELOR OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.89/4.3

2016.9 ~2020.1

Related Courses

- Computer Vision, Image Processing, Computer Graphics, Deep Learning, Digital Mesh Processing
- Game Programming, Full-stack Development and Design, Mobile Application Programming, Information Retrieval

Skills

Programming	C, C++, Python, TypeScript, HTML, CSS
Computer Graphic	OpenGL, Shader, OpenCV
Deep Learning	Pytorch, Tensorflow
Game Engines	Unity3D, Cocos Creator
Others	Android, Git, Docker, CUDA

Projects

Thesis

- Topic : Learning-based Game Card Watermarking System Integrated with Human Visual Perception
- Human imperceptible message watermark embedding (SSIM : 0.952, PSNR : 30.2)
- Attaining about 90% similarity score compared with the original image by doing user study
- Robust decoding performance against printing and capturing (Bit accuracy : 97%)

Undergraduate Senior Project

- A card interactive system for arcade and a demo game made with Unity3D
- (1) Real-time card detection and tracking, (2) Support multiple cards
- Parallelized with CUDA
- Achieve 30FPS when tracing 5 cards simultaneously using GTX 1080

Industry-Academy Cooperation Projects

- (1) Slot Game, (2) Roulette Slot Game
- HTML5 web game made with Cocos Creator game engine

Computer Graphic Projects

- OpenGL Robot
 - A 3D robot model made with OpenGL
 - With movable joints and several action demonstrations
- Mesh Parameterization and Texture Mapping
 - A program with GUI that can select meshes and map texture onto the chosen area

Self-designed 2D Barcode

- A 2D barcode based on voronoi diagram which can be decoded in real time (50 FPS) with the usage of CUDA
- Capacity : 48 bits (w/ BCH Code)

Fundraising Website

- Final project of full-stack web development class
- Based on MVC architecture (Front-end : Angular, Back-end : Laravel)

Notebook APP

- Final project of mobile application development class
- Integrated with Google Firebase