

# Yen-Liang, Lin

## GAMEPLAY PROGRAMMER

### CONTACT

(425) 326-0875

[asdfg1436@gmail.com](mailto:asdfg1436@gmail.com)

<https://asdfg1436.github.io>

### SKILLS

**LANGUAGES:** C, C++, C#, Python, Java

**ENGINE/TOOLS:** Custom Engine, Unity, UE4, Git

**SOFTWARE:** Visual Studio, Android Studio, Eclipse, Qt

### ACADEMIC PROJECTS

#### ROLE: ENGINE/GAMEPLAY PROGRAMMER

LightYear | CUSTOM ENGINE (C++, Python)

3D Action Tower defense game

- Implemented ECS engine architecture
- Designed scripting engine and embedded Python as scripting language
- Built octree for space partitioning to reduce collision pairs
- Implemented GJK and EPA algorithm for collision detection
- Implemented character skills and particle effects
- Implemented character skill tree
- Designed the tutorial level
- Designed the gameplay and game mechanics for the game and wrote GDD

Fall.2018–present

TEAM SIZE: 4

#### ROLE: GAMEPLAY/ AI PROGRAMMER

Magieval | CUSTOM ENGINE (C++)

2D Top-down battle royale game

- Built a simple audio engine using DirectXTK
- Implemented A\* pathfinding in grid-based map
- Implemented combat and bag/inventory systems
- Developed a finite state machine AI architecture and simulated player behavior

Spring.2018

TEAM SIZE: 3

#### ROLE: AI PROGRAMMER

AI Project | Unity (C#)

- Prototyped RTS style resource gathering and tower building game
- Implemented hierarchical task network planning for AI behavior

Spring.2018

TEAM SIZE: 2

#### ROLE: GAME PROGRAMMER

CrazyBomby | CUSTOM ENGINE (C++)

2D Top-down bomber-man game

- Built a component-based engine with event delegation and object factory.
- Implemented graphics and 2D animation using OpenGL.
- Implemented 2D simple physics behaviors and collision detection

Fall.2017

SOLO

#### ROLE: PROGRAMMER

Interactive Performance Using Wearable Device: Technology and Innovative Application | Android Studio (Java), Unity (C#)

- Integrated Android Studio and Unity project
- Developed application for Moto360 to send data detected by motion sensor to Android application through BLE
- Simulated arm action by analyzing acceleration and orientation in Unity

Feb.2015–Jan.2016

SOLO

### EDUCATION

#### MASTER OF SCIENCE IN COMPUTER SCIENCE

DIGIPEN INSTITUTE OF TECHNOLOGY, REDMOND, WA

Graduation: May.2019

#### BACHELOR OF SCIENCE IN COMPUTER SCIENCE

NATIONAL CHENGCHI UNIVERSITY, TAIPEI, TAIWAN

June.2016