# Chien-Yu Chu

Tools Programmer & Gameplay Programmer 214-713-2893 | sam830917@gmail.com | http://sam-chu.com/

## Languages

- C++
- C#
- Java
- JavaScript / HTML / CSS
- JQuery
- SQL
- OpenGL
- DirectX 11

#### **Tools**

- Visual Studio
- Unity
- Unreal
- Intellij
- Spring Boot
- Git
- Perforce
- Qt5
- Photoshop

## **Skills**

- Software Engineering
- Game Design
- Shader
- Unreal Blueprint
- Object-Oriented Design
- Data Structures
- Agile Development
- Procedural Generation
- Web Development

#### **Hobbies**

- Rubik's Cube
- Painting

# Work experience

Back End Engineer (Full Time) | TPIsoftware Feb. 2018 – Jul. 2019

- Implemented the internal ERP system modules for the 200 employees
- Generated the accounting sheets for user which display the asset details
- Handled the database with over 10000 data

# **Projects**

**2D Tile Map Editor with Scriptable Brush** Jun. 2020 – Present C++ | Qt 5 | Thesis

- Built tile-based map editor with layer, tools, and saving/loading the map
- Created scriptable brush system that allows user to customize the brush
- Structured a plugin for exporting a map from editor to Unity

Trikaya | SMU GUILDHALL

Jun. 2020 – Dec. 2020

Unreal Engine 4 | 11 people team | Shipped to Steam

- Established interactable object base class
- Programmed check point and saving system

HaberDashers | SMU GUILDHALL

Feb. 2020 – May. 2020

Unreal Engine 4 | 60 people team | Shipped to Steam

- Implemented kart movement and physics
- Designed game blueprint architecture through engineering discussions

**Light Up The Knight** | SMU GUILDHALL

Oct. 2019 – Dec. 2019

Unity 5 | 4 people team

- Developed setting panel for level designers
- Implemented auto path, combo system and score system

Personal Engine | SMU GUILDHALL

Sep. 2019 – Present

Jun. 2017

D3D11 C++

- Developed 2D and 3D rendering framework
- Designed multiple systems such as input, audio, event system, dev console
- Implemented 2D collision correction

## **Education**

**Southern Methodist University – Guildhall** | Plano, TX May 2021

Master of Interactive Technology, Specialization in Software Development

Fo Guang University | Yilan, Taiwan

Bachelor of Science in Department of Applied Informatics