

Mingfu Li

Gameplay AI Programmer

mingfuli11@outlook.com

682-553-9285

[mingfuli.github.io](https://github.com/mingfuli)

SKILLS

- Gameplay Programming
- AI Programming
- UI Programming
- 3D Graphics Pipeline
- 3D Math
- Skeletal Animation
- Computer Network
- Machine Learning
- Mobile Development
- Object Oriented Design
- Data Oriented Design
- Data Structure
- Algorithms

LANGUAGES

- C/C++
- C#
- Lua
- Python
- UE Blueprint

Tools

- Unreal 4
- Unity
- Visual Studio
- Git
- Perforce
- UGS
- Jira
- Maya
- Adobe Photoshop
- Figma

WORK EXPERIENCES:

Farlight 84, Lilith Games

3D Third-Person Shooter Game

Game Client Engineer Intern / UE 4 / Shipped to Mobile & PC May – Aug 2022

- Iterated the UI and features in weapon inventory and custom match room
- Performed memory optimization by reducing spawning models and network requests
- Cooperated with server engineers to develop and debug APIs

TEAM PROJECTS:

Grandma Green

2D Simulation Game

Gameplay AI Programmer / 20 developers / Unity

Sep 2022 – Present

- Created our AI companion's system which includes AI's spawning, evolution, and emotion
- Designed and implemented AI companions' interactions and behaviors
- Collaborated with artists to build our 2d character pipeline
- Incorporated and maintained dev tools including behavior tree, event manager and so on

Project: Weapon Master

3D Action Game

Gameplay AI Programmer / 2 developers / Unity

Jan 2023 – Present

- Developed and iterated the mechanism, physics and movement of our uniquely designed weapon
- Implemented enemies' navigation, combat, and behaviors

SOLO PROJECTS:

Navmesh and Pathfinding Tech Demo

3D Third-Person Game

Solo Developer / C++ / Custom Engine

Dec 2022

- Imported and integrated the NavMesh from Maya into custom engine
- Implemented pathfinding algorithm such as A* algorithm and funnel algorithm to smooth paths
- Implemented a third-person character controller and camera
- Designed and implemented AI behaviors in a hide-and-seek mini game

Custom Game Engine Development

3D Third-Person Game

Solo Developer / C++ / Custom Engine

Aug 2022 – Nov 2022

- Developed gameplay, physics, graphics features in our custom game engine
- Implemented 3D physics component with collision detection and gravity
- Modified shaders and rendering pipeline to support wind effect and Frustum Culling

EDUCATION:

University of Southern California

Los Angeles, CA

Master of Science in Computer Science

Grad Date: May 2023

Game Development Track

Southern Methodist University

Dallas, TX

Bachelor of Science in Computer Science

Aug 2017 - May 2021

AI and Machine Learning Track