

# Yuxian Deng

## Gameplay/AI Programmer

✉ [yuxian312@gmail.com](mailto:yuxian312@gmail.com)

☎ (385)-210-5969

🏠 [yuxiandeng.info/En/about](http://yuxiandeng.info/En/about)

🐙 [github.com/yuxian1996](https://github.com/yuxian1996)

🌐 [www.linkedin.com/in/yuxian-deng](https://www.linkedin.com/in/yuxian-deng)

## SKILLS

### Programming Languages

C++ C#

### Software and Tools

UE4 Blueprints Visual Studio  
Git Perforce Maya Photoshop

## EXPERIENCE

### WB Games | Avalanche

*Salt Lake City, UT*

Unannounced Project, UE4

*Oct 2018 - Present*

#### Engineer Intern

- Worked with designer and implemented a specific enemy AI
- Applied and blended character animation to different AI state to make it more realistic
- Helped maintain and debug AI system

### Therapeutic Game and Apps Lab

*Salt Lake City, UT*

Surgery Checklist, Unity, published on IOS

*May 2018 - Present*

#### Engineer

- Created and managed UI elements from a surgery checklist template
- Generated PDF file from the checklist which users fill
- Created customization tools for the administrator to make their own checklist template

## PUBLISHED GAMES

### And I Must Scream

*Feb 2019*

2.5D narrative puzzle

*UE4, PC*

#### Gameplay Engineer (AI)

- Communicated with designers about details of mechanics
- Built a tool for following a path which provided many types of routing for other engineers
- Implemented enemy AI system including routing, patrol and flocking

### Meaty McSkinBones

*Mar 2019*

Puzzle platformer

*UE4, PC*

#### Gameplay Programmer

- Worked with designers to build various mechanics
- Worked with artists to program character animations by state machine
- Implemented character movement and interactions for puzzles

## PROJECTS

### AI For Games

Software, C++

- Created character movement and steering behaviors, including seek, arrive, wander and path following
- Transferred 2D grey images to graphs, implemented pathfinding by A\* and integrated them with character movement into an interactive system

### Game Engine

A simple 3D game engine

- Built basic graphics, movement and math systems
- Made assets builder to convert human-readable files to binary file by Lua
- Built behavior tree system to control AI behavior

### Kudzu: the Wild

2D serious game, Unity

#### Gameplay Programmer

- Implemented the function of avoiding obstacles in AI navigation system
- Implemented gameplay logic of animal spawning and animation system
- Programmed camera movement and control

## EDUCATION

### MEAE Masters, Game Engineering

*May 2019*

*University of Utah*

### B.Eng, Digital Media Technology

*Jun 2019*

*Zhejiang University*