

Jiayu Liu

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2-year Experience with Unity3D. Solid Skills in C# and C++, VR/AR Development.

EDUCATION

M.S. Game Science and Design, Northeastern University, Boston Dec. 2017

B.S. in Computer and Cognitive Science, Xiamen University, China July 2014

Academic Exchange in **Computer Science**, National Chiao-Tung University, Taiwan Jun. 2012

Related Courses: C and C++ Programming, Data Structures, Algorithms, Level Design, Game AI, Computer Graphics, Building Game Engines, Eye-tracking Studies, Sound Design.

SKILLS

Languages: C#, C/C++, JavaScript, HTML5, Python, Java/Android.

Experienced Game Programming and Prototyping with Unity3D/UE4: Physics, Graphics, UI, VR, AR, etc.

Working Knowledge in Unity3D and Oculus. Projects in AR, Computer Vision and SDK Development.

Other: Git; Google Cardboard, Leap Motion, Arduino, Eye-tracking; Maya; Wwise, FMOD, Pro Tools.

EXPERIENCE

VR Programmer Intern | Tipping Point Media, LLC June 2017 – (Est.) Sept. 2017

- Building exciting interactive VR experience in Oculus using C#/Unity and Oculus Touch with engineer team.
- Contributing natural gameplay results, cool sci-fi shaders and VR UI in easy-maintainable code in C#.

Programmer, Designer | Fold It - Biochemistry Educational Game Jan. 2017 – Apr. 2017

- Designed and implemented tutorials in C++ for new features in the game, which is played by 50,000 people.
- Added new functionalities and refined the C++ interfaces for future tutorial programmers.

Programmer | Mad Science, NU Game Studio Oct. 2015 – Sept. 2016

- Built gameplay logic in Unity and improved the code base by implementing singleton design.
- Created a module that updates player-defined assets across scenes in runtime, which enabled customization.
- Designed and deployed test cases and fixed bug issues.

PROJECTS

Game Developer | SugAR Poke iOS/Android AR Game Apr. 2017 – Present

- Created the prototype using Unity, Vuforia SDK and large database, currently working on the game side.

Sole Developer | Prototype4AR Augmented Reality (AR) Framework Dec. 2016 - Present

- Designed the architecture and functionalities that help users rapidly prototype for desktop/mobile AR applications and built from scratch in C++ with Open Source Computer Vision (OpenCV) libraries.
- Encapsulated low-level functions to readable and maintainable APIs, including tracking real-world objects, drawing 2D/3D sprites, specifying movement patterns and interaction rules, etc.

Designer, Programmer | LeafVR (Cardboard VR Game with Unity3D) Nov. 2015

- Designed “sound input” as an unconventional game mechanic, such as slow motion, that drives gameplay.
- Worked on camera and physics to provide a realistic gameplay experience of moving and control, meanwhile maintaining a reasonable frame rate with Google Cardboard on Android.