

Jiayu Liu

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2-year Game Development Experience in Unity3D. Solid Skills in C# and C++. Strong Interest in VR and AR.

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.