GUANGHAO YANG

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EDUCATION

Entertainment Technology Center, Carnegie Mellon University, Pittsburgh, PA   Aug 2017 – (Expected)May 2019
Master of Entertainment Technology

Nanjing University of Posts and Telecommunications, Nanjing, China   Sep 2011 – Jun 2015
Bachelor of Engineering (Digital Media Technology)

SKILLS

Computer Languages: C/C++, C#, Java, JavaScript, Cg, ActionScript3, Lua, Perl, Ruby
Software: CryENGINE, Unity, 3DsMAX, Blender, Flash/Flex, Photoshop, Illustrator, After Effects, Premiere, Audition

WORK EXPERIENCE

Ubisoft, Shanghai, China | Gameplay Programmer   Dec 2014 – Jun 2017

- **Trolls: Crazy Party Forest!**   Jun 2015 – Jun 2017

Implemented various gameplays, including a high-level robust animation system which supports advanced features.
Created basic gameplay state machine to support the whole game system.
Implemented certain server functions, took the responsibility of transitions between server and client.

- **Horse Haven World Adventures**   Jan 2015 – May 2015

Refactored the audio system to fix some long existing bugs and improve the visual of game a bit.

Giant Interactive Group Inc. Shanghai, China | Client Engineer Intern   May 2014 – Dec 2014

- **Visionary City**   Jun 2014 – Dec 2014

Integrated Kinect2 into CryENGINE to give users an immersive experience of the virtual Shanghai Xuhui District.

ACADEMIC PROJECTS

Build Virtual World at the ETC |Programmer   Sep 2017 – Nov 2017
During a rapid game prototype project-based course, implemented gameplay efficiently according to the design as well as created a customized physical system to increase the playability of our games. Created a pipeline to load and manage art assets dynamically. Our game platforms include HoloLens, Vive, AR-kit, Omni, Oculus.

Physically based rendering in Games |Programmer   Sep 2014 – Jun 2015
Researched and optimized the existing PBR technologies in game and implemented a wetness effect shader in the demo.

Image Color Feature Extraction on Content-based Image Retrieval |Team Leader   May 2013 – Jun 2014
Conducted the research and implemented the algorithm to retrieve similar images in the database with the help of combing Quad tree based segmentation and Histogram analysis.

PERSONAL PROJECTS

Dungeon Miner | PC | Programmer, Designer, Pixel Artist   Aug 2016 – Dec 2016
Programmed the whole game; Designed levels to test possible strategy; Creating pixel sprites and animated them.

Orbity Space | iOS/Android | Programmer   Jun 2016 – Nov 2016
Implemented a part of game framework as well as some gameplay stuff like map auto scrolling and shaders on planets.
Created UI assets based on the game setting.

PUBLICATIONS

The Method of Research and Improvement in Image Color Feature Extraction on Content-based Image Retrieval(CBIR)
Published on *Computer Knowledge and Technology (J), 2014, 11:2642-2646+2648. ISSN:1009-3044*   as 1st Author.