Yifei Zhao

Phone: 412-478-6583; Email: yifeiz3@andrew.cmu.edu;

EDUCATION BACKGROUND

Carnegie Mellon University, Entertainment Technology Center Sep 2017
Master of Entertainment Technology

International School of Beijing University of Posts and Telecommunications Sep 2013
Telecommunications Engineering with Management
Relevant Courses: Introduction to Java, C, Software Engineering, 3D Graphics Programming Tools

SKILLS

Programming Language: C/C++, C#, Java
Software Platform: Unity3D, X-code, Adobe Premiere, Ableton Live, Adobe Audition
Languages: Chinese, English

ACADEMIC PROJECTS

Build Virtual Worlds, ETC Oct 2017

- Game development as a programmer every two weeks in team of five people.
- Enhancing the skills of teamwork with discussing game design and implementation details with members of other roles.
- Implemented game functionalities on different platforms of Virtual and Augmented Reality, such as HTC Vive, Microsoft HoloLens, Apple ARKit.
- Implemented the dragging interaction and hand cursor on HoloLens.
- Designed and implemented scene switching state machine for storytelling round.
- Implemented throttle shifting and steering wheel rotation mechanism.

Micro-Arduino Game Design, BUPT Jul 2016

- Designed and implemented the collision detection engine using data structures, collision detection algorithms, and interfaces to the upper layer code based on C.
- Implemented the collider structure with its size and position and used linked list as the data structure of the collider pool to achieve the integrated arrangement of colliders.
- Implemented create, delete, and move methods as the interface to the upper layer of code.
- Manipulated the colliders using pointers to modify the basic linked list structure and reduced the complexity of element searching.
- Implemented the collision detection through nested iteration of the colliders in the pool with identification of whether the colliders overlapped.

PERSONAL PROJECTS

Indie Game Development—Dumb Face Jan 2016

- Participated in the initial game design of the game mechanism, which was decided to be a mix between the platformer and music rhythm genres.
- Completed animation of the in-game model including move, jump, strike and sprint based on Unity 3D.
- Wrote the Music Game mechanism and the falling of beats reference objects, and implemented beats accuracy check when ramming according to the difference in positions of the hit position and beats reference objects.
- Designed music beats points and improved the game mechanism by reading exported CSV files of time data to generate beats reference objects at certain times.

Global Game Jam 48-hour Indie Game Development Jan 2017

- Designed and implemented the game mechanism with the real-time spectrum of background music.
- Implemented spectrum equalization and amplitude limiting.
- Completed and optimized the animation of terrain with coroutine in C#.
- Designed and produced sound effects in the game including audio feedbacks and low-pass filter.
- Designed and completed the visual effects of circular spectrum as the back stage.