ZHANG, TIANYI

http://github.com/tankijong | http://im.tanki.ninja

tanki_jong@hotmail.com

(214)679-6560

ACADEMIC EXPERIENCE

East China University of Science and Technology
B.Eng. in *Computer Science*   *Sep. 2012 - Jun. 2016*

East China University of Science and Technology
B.Arts. in *Art Design*   *Jan. 2013 - Jun. 2016*

Guildhall at Southern Methodist University

Master's in *Interactive Technology* **Aug. 2017 - May. 2019**

SKILL SET

· C++	· Visual Studio
· Java	· Render Doc
· C#	· Pix
· Javascript	
	· Unreal 4
· Perforce/Git	· Unity

PROJECT EXPERIENCE

 TEAM **Teddy's Fluffy Adventure**   **General Programmer**
- Account for the game design and be consulted for the art assets, maintaining GDD and TDD
- Making high-level system structure and core game mechanics, including implementing the direction guide line.

 TEAM **Interstellar Racing League**   **Graphic/Performance Programmer**
- Implement split-screen multiplayer with post-processing enabled in Unreal 4.
- Profile the build and provide performance advice to other team members.
- Deliver a document, *Unreal 4 Performance Guide*.

 SOLO **Morph Engine**   **Aug 2017 - Now**
- Build from scratch 3D Game engine to learn different aspects of a game engine.
- 200,000 lines of code edition in a one year.

 SOLO **DirectX 12 Integration in Morph Engine**   **May 2018 – Aug 2018**
- A rendering hardware interface layer inspired by NVIDIA's Falcor Engine.
- DirectX 12 was integrated into my personal Engine

 SOLO **Thesis: Hybrid Rendering Pipeline and Denoising Method**   **Jul 2018 – May 2019**
- Based on a deferred rendering pipeline, use ray tracing method to handle the ambient occlusion and shadow.
- Learn different frameworks to implement the ray tracer, including DXR, Compute shader, CUDA…
- Design and implement the framework so that frame data can get collected during the runtime for filter training.
- Apply filters to noisy ray traced buffer, compare and analyze the result.

WORK EXPERIENCE

Alibaba Group   **Hangzhou, China**
Software Engineer Intern, Dept. of Security/ Dept. of Information Platform   *Jun.2015 – Sep.2015*

- J2EE backend development of the operating system, Ali Cloud Shield.
- Mainly responsible for several feature sets, and a tool to customize the packaging process for deployment.
- React frontend development of the inner recruitment system.

DaoCloud.io   **Shanghai, China**
Full Stack Engineer, Dept. of Development   *Dec.2015 – Dec.2016*

- Full stack development including AngularJS frontend and Flask(Python) backend.
- Responsible for the development and maintenance of the DaoStyle component library.