### Siyu Liu

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**Address:** Room 1, Flat 37, Jesmond Road West, Newcastle Upon Tyne, Tyne and Wear, NE2 4EU **Video Portfolio**: https://www.youtube.com/channel/UCPhAN2J9DbNpv9oxBgrxlEQ/videos

A game programmer with computer science background. Excels in both collaborative team based and individual work. Keen to work on game graphics and challenges.

### **Education History**

## 2014 - Present MSc Computer Game Engineering (Current average 76.6%) Newcastle University

A game development focused programming course designed to give maximum understanding of the underlying technology in game engines. The course focuses on programming, not game design.

- Programming is all done in the C++ language, as is appropriate for the industry.
- OpenGL is used to code modern graphical techniques.
- Created a graphics engine using OpenGL, featuring programmatically generated tree, defer lighting, and particle effects.
- Created a physics engine with octree, generated dynamic water using NVidia CUDA, and birds flying effect using flocking algorithm.
- Created a fast prototype of an endless-runner type game in UE4 in five days.
- Created particle system along with Perlin noise to simulate fire and afterburner of spaceship.
- Developed an endless-runner game using OpenGL as a team-based project, majored in graphic parts.

# 2010 – 2014 BSc Computer Science and Technology (averaged 84.5%) Changzhou Institute of Technology, Jiangsu, China

Learning fundamental knowledge in computer science for 4 years, which includes both hardware and software.

- Learned Practical C and Java and used them to develop different kinds of software.
- A good understanding of computer data structure and operation system.
- An understanding of software engineering.
- Learned assembly programming in space-time.
- Experience of Android development in smartphones.
- Learned OpenGL programming and computer graphics in space-time.
- Project Leader for provincial university student practical innovation project in the academic year of 2012-2013. Theme was "OpenGL-based 3D combat game development".

#### **Scholarships:**

- Newcastle University International Postgraduate Scholarship(NUIPS) in 2014
- Two technological innovation scholarships from Changzhou Institute of Technology in Nov. 2012 and in Nov. 2013.
- One outstanding academic scholarship from Changzhou Institute of Technology in Nov. 2013.

## **Employment History**

## June - August 2011 ZHONGSHENG Technology Co. Yangzhou, China

Assistant role in a computer technology based company.

- Cooperated with other experienced engineers to resolve software problems.
- Investigated analysis of software requirements with customers.
- Conducted site visits along with team leader and designed project plan.

## **Other Competencies**

#### **Interests**

- Interested in beautiful paintings and Chinese calligraphy.
- Love sports, especially football, because of the team spirit and hard work involved.
- A fan of science fiction movies and learned some techniques about film post-production.

#### **Activities**

- Took part in Search for a star competition and reached the second round in 2015.
- Received certificate of qualified software designer from Ministry of Industry and Information Technology of the People's Republic of China in 2013.
- Runner-up in the C programming competition in Changzhou Institute of Technology in 2012.
- Became a volunteer in the 17th Jiangsu Games in 2010.

## References

#### **Gary Ushaw**

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#### Jun Sheng

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Additional references available on request.