

## Yao Yansi

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### OBJECTIVE

A position in IT Industry with special interests in software engineering.

### EDUCATION

Master Of Computer Science, Graduated in 2007  
Capital Normal University, Beijing, China.

Bachelor Of Computer Science, Graduated in 2004  
Henan University of Technology, ZhengZhou, Henan, China.

### COMPUTER SKILLS

*Languages:* C/C++, Python, Shell, Perl, x86ASM

*Operation Systems:* Windows, Linux

*Development Tools:* MSVC, CodeBlocks, CMake, SVN/Git, Jude, OpenGL/GLSL, OGRE, ODE, PhysX, Bullet, MayaAPI/mel, OpenCollada, MASM

*Graphics Tools:* Maya, Blender, Photoshop

*Others:* Design Pattern

### EXPERIENCE

**Software Engineer** September 2013

Renderer R&D Department, **ShangHai CudaTec Technology Development Limited Company**

- Designed, implemented and tested a Maya plug-in for a offline renderer using agile methodologies: continuous integration, test-driven development, unit testing and automation testing. And took the responsibility for releasing the package from alpha1 to alpha5.
- Responsible for planning, design, development, collaboration, code review, testing and release.
- Constructed and maintained the code repository server for the team.
- Provided services for test clients and users.

**Software Engineer** June 2012

Production Department, **Geodo Space Information Technology Limited Company**

- Developed a tornado particle effect for OSG engine.
- Trimmed *ossim* which is a third-party library for our engine.

**Software Engineer** March 2011

3D Graphics Department, **Institute of Automation Chinese Academy of Sciences**

- Developed a 3D virtual world based on *RealXtend* with the integration of *Kinect*, *OgreHaptics*, fluid surface construction and UI localization.
- Integrated Blender's GPU renderer *Cycles* with parallel rendering middle-ware *Equalizer*.

**Technical Director** July 2009

Technical Support Department, **Xing-Xing Digital Corporation**, Beijing

- Developed the core module of lip-sync plug-in for Maya. (This plug-in has been registered

- as the software property with the software copyright registration ID 0183406)
- Developed a product-quality Maya to 3ds format translator for *Redboard* Ltd.
- Developed a rigid/soft body dynamic system for Maya based on *Bullet Physics Engine*.
- Developed a procedural texture which projects the inner region of a closed NURBS to a texture.
- Optimized the modules in pre-check process, and saved 80% time for that process.
- Implemented the core module in the paper: *A System to Reuse Facial Rigs and Animations*.
- Parsed Maya Geometry Cache(\*.mc) format and Maya Particle Cache(\*.pdc) format.
- Maintained *LiquidMaya*.
- Designed and deployed the SVN server, and developed the backup/restore scripts for the SVN server.

**Software Engineer** September 2008

System Department, **Tuya Software Corporation**, Beijing

- Participated the development of TUYA World II which is a 3D virtual world on-line game, including Friends System, District System.

**Software Engineer** September 2007

Software Development Department, **China Academy of Space Technology**

- Part of a team for software automation test.

**Software Engineer(intern)** March 2007

R&D center of Notebook Computer, **Lenovo**, Beijing

- Developed a 3D mini-game for exhibiting the gravity system in *Lenovo's* laptops.

## RESEARCH

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Master's Thesis:

- *Research and implementation of the 3D operation in virtual environment*

Implementation of the academic paper:

- *A System to Reuse Facial Rigs and Animations*

## OPEN-SOURCE PROJECTS

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- MyMagicBox (<https://github.com/yaoyansi/mymagicbox>)  
Role: Creator  
Miscellaneous project for exercises.
- Maya2renderer(<https://github.com/maya2renderer/maya2renderer>)  
Role: Creator  
Based on *LiquidMaya*, this project aims to provide a framework to translate Maya data to a renderer. It supports *3Delight*, *Elvishray* and *Appleseed* now.
- MayaExporter(<http://code.google.com/p/mayaexporter/>)  
Role: Creator  
An experimental project which aims to provide a framework to export Maya data to a renderer. This project is refactored from *ColladaMaya*..
- GPExporter(<http://code.google.com/p/gpexport/>)  
Role: Developer  
A light-weight exporter for Maya, and I fixed some bugs and did some optimization.

- Simple Cloth Simulation (<http://blog.csdn.net/yaoyansi/archive/2007/09/05/1774002.aspx>)  
Role: Creator  
Implemented the Mass-Spring module for cloth simulation. Developed an algorithm for computing a general polyhedron's volume. This algorithm is mentioned in *Game Development Gems 6*.
- OpenCollada(<http://code.google.com/p/opencollada/>)  
Role: Developer  
Simplified the 3ds export process with *lib3ds* library and fixed some bugs.
- GPUSPHsim (<http://code.google.com/p/gpusphsim/>)  
Role: Developer  
Implemented the fluid surface construction using Meta-ball algorithm.