### Yao Yansi

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#### **OBJECTIVE**

A position in CG Industry with special interests in CG R&D.

#### **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 *Operation Systems:* Windows, Linux

Development Tools: MSVC, CodeBlocks, CMake, SVN/Git, Jude, MayaAPI/mel, OpenCollada,

OpenGL/GLSL, OGRE, ODE, PhysX, Bullet *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 product-quality Maya plug-in for a renderer using agile methodologies: continuous integration, test-driven development, unit testing and automation testing.
- Responsible for planning, design, development, collaboration, code review, testing and release.
- Created and maintained the code 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 Maya exporter for custom format.
- Developed a tornado particle effect for OSG engine.
- Trimmed ossim for our engine.

### **Software Engineer** March 2011

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

- Developed the 3D virtual world based on *RealXtend with the integration of Kinect(server and client)*, *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 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.

# **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 notebook computer.

### RESEARCH

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**

• Maya2renderer(<u>https://github.com/maya2renderer/maya2renderer</u>)

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(<a href="http://code.google.com/p/mayaexporter/">http://code.google.com/p/mayaexporter/</a>)

Role: Creator

Refactored an exporter based on ColladaMaya.

GPExporter(<a href="http://code.google.com/p/gpexport/">http://code.google.com/p/gpexport/</a>)

Role: Developer

Some bug fixes and optimization.

• Simple Cloth Simulation (<a href="http://blog.csdn.net/yaoyansi/archive/2007/09/05/1774002.aspx">http://blog.csdn.net/yaoyansi/archive/2007/09/05/1774002.aspx</a>)

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(<a href="http://code.google.com/p/opencollada/">http://code.google.com/p/opencollada/</a>)

Role: Developer

Optimized the 3ds export with lib3ds, and some bug fixes.

• GPUSphsim (<a href="http://code.google.com/p/gpusphsim/">http://code.google.com/p/gpusphsim/</a>).

Role: Developer

Implemented the fluid surface construction using Meta-ball algorithm.