

WORK EXPERIENCE

DREAMWORKS ANIMATION SKG, Glendale, CA*Sep 2009 – Present*

Film Credits – Home (Happy Smekday), B.O.O: Bureau of Otherworldly Operations, How to Train Your Dragon 2, Rise of the Guardians, Kung Fu Panda 2, Kung Fu Holiday TV Special

Character Effects / Tech Anim Technical Director

- Co-designed and created new tech anim cloth and fur installation pipeline for all future shows at the studio. Wrote python scripts and modules for new pipeline and assisted in rollout of software to new shows.
- Helped prepare studio for Alembic file system by writing and optimizing Alembic python tools, extensively testing Alembic plugins in Houdini and Maya, and investigating impact on tech anim pipeline.
- Developed shot completion system in python and PyQT that checks in and validates artists' models and files.
- Developed crowds validation tools and tested tech anim finaling system to allow artists to work with crowd characters more efficiently in the tech anim pipeline.
- Supported tech anim artists with technical issues that arose during cloth, hair, and feather installation, finaling work for character assets in Maya and Houdini, and rendering.

Lighting Technical Director

- Wrote python tools for the studio movie viewer to pull up sequence continuity for currently selected shots.

Animation Technical Director

- Created library animation system that allows artists to simulate environment assets once and propagate the simulation across all production shots with the asset installed.
- Set up initial shot animation and assisted animators with technical issues that arose in shots for production.

KCC APPS, Glendale, CA*May 2011 – Jan 2013***Founder / Software Engineer -- Mobile Android Applications**

- Developed QuickText application in Java using the Android SDK which allows users to send pre-saved SMS messages to selected contacts in three simple button presses.
- Developed Street Fighter 4 Pocket Guide which displays frame and move data for all characters in the game.

ELECTRONIC ARTS -- TIBURON STUDIO, Orlando, FL*May 2009 – Aug 2009***Rendering Engineer**

- Worked on the backend (C#) and runtime side (C++) code for the game "MMA" for Xbox 360 and PS3.
- Handled venue and gym lighting, shadow, and texture game code, as well as additions to the backend database game asset system. Maintained asset data files (XML) and worked with artists to hook up art assets into game.

CENTER FOR HUMAN MODELING AND SIMULATION, University of Pennsylvania*Jan 2009 – May 2009***Motion Capture Lab Assistant**

- Documented and assisted students with proper use of Vicon Nexus motion capture system.

RenderMan Renderfarm Manager

- Managed all of the RenderMan projects and jobs sent to the 60+ node renderfarm.

EDUCATION

University of Pennsylvania, School of Engineering & Applied Science, Philadelphia, PA *Aug 2008 – Dec 2011*

M.S.E. Computer Graphics & Game Technology

University of Virginia, School of Engineering & Applied Science, Charlottesville, VA *Aug 2003 – May 2008*

B.S. Computer Engineering, Minor. Engineering Business

COMPUTER / LANGUAGE EXPERIENCE

Graphics Tools – Autodesk Maya, RenderMan (Studio, ProServer), Houdini, Mari, OpenGL, ZBrush, MotionBuilder**Game / Physics / Cloth Engines** – Xbox 360, Playstation 3, Qualoth, Unreal Engine, Ogre3D, Gamebryo, PhysX**Languages** – Python (PyQT), C/C++, Java, Android SDK, C#, MEL, HLSL, UnrealScript, SQL**Web Technologies** – HTML, CSS, PHP, JavaScript, XML