

# Tony Chai

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## EXPERIENCE

### Walt Disney Animation Studios

March 10 - Present

<http://www.disneyanimation.com/>

#### Technical Director

*Creative Legacy with Walt Disney Imagineering, Virtual Reality*

Created a cross-studio pipeline with Walt Disney Imagineering to deliver animation mapped onto robot animatronic rigs and renders used in projection screens for the Disney Parks. Forecasted total render hours and disk space allocation to bid complexity and fit within budget scope. Created an Unreal Engine pipeline to visualize future theme park rides with our published animation. Co-created a Unity pipeline for Disney's first VR short, *Cycles*, shown at SIGGRAPH 2018.

#### General Technical Director

*Ralph Breaks the Internet (2018), Olaf's Frozen Adventure (2017), Moana (2016), Zootopia (2016)*

Led technology initiatives between Disney, Pixar, Lucasfilm, and ILM to share processes and techniques between our studios. Prioritized software tasks based on risk vs reward for production needs. Designed asset conversion process to support older data from previous productions. Mentored other Technical Directors to complete pipeline/support tasks.

#### Effects Technical Director

*Big Hero 6 (2014), Frozen (2013), Wreck-it Ralph (2012), Tangled Ever After (2012)*

Product Owner of effects's code repository, handled code reviews and design decisions for new contributions. Automated fx templates to run based on certain conditionals from front-end departments (animation/layout), saving hundreds of hours. Developed tools in Houdini/Maya to support heavy fx datasets for lighting.

#### Lighting Assistant Technical Director

*Prep and Landing: Naughty vs Nice (2011), Tangled (2010)*

Pipeline data management between lighting and effects. Developed publish process for lighting to pick up GL visualization of procedural elements. Rendered lighting shots and composited stereoscopic shots.

#### Stereoscopic Artist

*Lion King 3-D (2011)*

Stereoscopic compositing. Created depth maps in the original artwork layers to final shot.

### soVoz

October 09 – February 10

<http://www.sovoz.com>

#### Software Developer

Worked on interactive 3D simulation/gaming content for a variety of applications, such as using an elliptical exercise machine as a virtual locomotion controller for a motorcycle racing game.

## EDUCATION

### University of Pennsylvania, Penn Engineering/Penn CIS

Masters of Science in Engineering in Computer Graphics and Game Technology 12/2009

Relevant Courses: Computer Animation, Computer Graphics, Game Design and Development, 3D Modeling, Physically-Based Animation, Engineering Entrepreneurship

### University of California Irvine, College of Engineering

Bachelor of Science in Computer Engineering 03/2008

Relevant Courses: Graphics (OpenGL), Algorithm Design, Electronics, Computer Architecture

## TECHNICAL

**Languages:** Python, C++, Qt, OpenGL, MEL, HTML

**Applications:** Unreal Engine, Unity, Houdini, Maya, Nuke, RenderMan, Android App Development, ZBrush, Adobe Premiere/After Effects/Photoshop, Arduino Microcontroller, VICON Motion Capture