

# Sarah McGee

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## EXPERIENCE

**Zoic Studios**, Los Angeles, CA

*Pipeline Manager, June 2016 to Present*

Developed automated render queue management algorithm on Google Cloud to increase render capacity by 300% and reduce per node costs by 23%.

Designed and developed Houdini pipeline by leveraging reusable Python libraries from Maya and Nuke pipeline and building custom nodes for Houdini-specific features.

Trained and mentored junior developers.

*Pipeline Tools Developer, September 2009 to June 2016*

Developed photogrammetry tools for virtual sets featured in the VES-nominated “Once Upon a Time” pilot and Universal Studios Virtual Stage demo.

Developed and released previs iPad app, ZEUS:Scout, and camera tracking iOS app, ZEUS:Track, on Apple App Store.

Created previs tools for virtual stage sets on the iPad for “Once Upon a Time”, “Once Upon a Time in Wonderland”, “Intelligence”, “Descendants”, and “Pan Am”.

## EDUCATION

**Carnegie Mellon University**, Pittsburgh, PA

Masters in Entertainment Technology, May 2010

**Rice University**, Houston, TX

B.S. in Electrical and Computer Engineering, Cum Laude, May 2008

## TECHNICAL SKILLS

**Languages:** C/C++, Python, MEL, C#, VEX, JavaScript, Objective-C, Assembly, RSL

**3D Software:** Houdini, Maya

**2D Software:** Nuke, After Effects, DaVinci Resolve, Photoshop, Premiere, Hiero

**API:** Houdini, Maya, Nuke, Hiero, CUDA, After Effects, Shotgun, Unity, OpenGL

**OS:** Windows, Unix, Mac

**Management:** Technical Management, Team Leadership, Staff Development

## PRESENTATIONS

**SXSW 2017**, “*Can a Film Made by a Machine Move You?*”

Presented automated music video editing algorithm based on a heuristic function for songs with a four-four meter signature that follow an AABA form.

**SIGGRAPH Exhibition 2016**, “*Houdini Pipeline Integration and Arrow VFX Breakdown*”

Presented ease of porting Zoic’s core Python tools from Maya and Nuke into Houdini.

## LANGUAGE SKILLS

Intermediate Japanese

## ORGANIZATIONS

**Visual Effects Society** (Awards Committee Member)

Chair of Ballot Software Sub-Committee