

SARAH MCGEE

Applied AI Entertainment Technology Leader

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Expertise in managing computer graphics application development for the entertainment industry in the areas of animation, visual effects, and virtual reality. Leveraging LLM, ML, and AI techniques to accelerate graphics feature development and reliability. Passionate about building, leading, and mentoring highly effective multi-disciplinary teams.

WORK EXPERIENCE

META

Applied AI Graphics Software Engineering Manager | JUN 2025 - Current

- Managed 14 reports, consisting of 12 software engineers and 2 tech leads across 2 teams responsible for real-time 3D rendering agentic tooling, stability and reliability in proprietary game engine on desktop and mobile.
- Led technical direction, strategy, and architecture to improve stability, reliability, and scalability for 1000-person distributed engineering organization by building custom agents and Claude skills to author high quality code and test coverage per domain specification.
- Conducted 1:1s, performance reviews, and career development planning with direct reports. Grew 1 engineer from senior to staff and 2 engineers from mid-level to senior.

META

VR Tools Software Engineering Manager | Apr 2022 – JUN 2025

- Managed 14 reports, consisting of 11 software engineers and 3 tech leads across 2 teams responsible for developing real-time 3D rendering C++ visual quality asset review (shading, lighting, materials), node graph editor, performance profiling and validation tools for internal artists and external creators using modern rendering APIs on the Oculus Avatars product for VR, desktop, and mobile cross-platform product releases.
- Led MVP and project planning of machine learning powered Re-Texturing web tool for 3P creators with advanced rendering techniques (PBR). Coordinated project across 3 distributed engineering teams, product, design and prompt debugging. Exceeded launch target revenue by 3x.
- Grew team for high priority effort from 4 to 14 software engineers by hiring and onboarding 3 tech leads and 7 software engineers.
- Conducted 1:1s, performance reviews, and career development planning with direct reports. Grew 1 engineer from staff to senior staff, 1 engineer from senior to staff, 2 engineers from mid-level to senior, and 4 engineers from junior to mid-level.

META

VR Animation Software Engineering Manager | Jan 2020 – Apr 2022

- Managed 10 software engineers across 2 teams responsible for developing interactive real-time 3D rendering tools for internal artists on the Oculus Avatars product and for developing tools for external customers on the Oculus Rift and Oculus Quest for creating and viewing VR Animation.

- Led product management initiative and roadmap for rapid prototype iterations of new user interfaces and workflows.
- Coordinated initiative between engineering, product, design, art, and translation to deliver Japanese localization for VR Animation media app in 3 months as an Oculus Quest 2 launch title for Japan.
- Conducted 1:1s, performance reviews, and career development planning with direct reports. Grew 4 engineers from mid-level to senior and 2 engineers from junior to mid-level.

ZOIC STUDIOS

Pipeline Software Development Manager | Jun 2016 - Dec 2019

- Managed team of 7 software developers and technical directors across VFX pipeline and client data visualization projects to create new revenue streams and to reduce artist costs.
- Led project management for interactive data visualization VR experience on HTC Vive for Capital One.
- Spearheaded new business development initiatives.
- Led project management for multi-million dollar, large touch screen software application project.
- Led initiative to integrate Houdini into pipeline to improve quality of FX elements.
- Collaborated with IT team and BC Pipeline team to deploy Google Cloud job submission management system to increase global illumination, ray tracing, and compositing render capacity by 300% and reduce per node costs by 23%.
- Hired and onboarded 7 new developers and technical directors over 3 years.

ZOIC STUDIOS

Pipeline Tools Developer | Sep 2009 - Jun 2016

- Developed photogrammetry tools for virtual sets featured in the VES-nominated “Once Upon a Time” pilot and Universal Studios Virtual Stage demo.
- Created previs tools for virtual stage sets on the iPad for “Once Upon a Time”, “Once Upon a Time in Wonderland”, “Intelligence”, and “Pan Am”.

EDUCATION

CARNEGIE MELLON UNIVERSITY

Masters in Entertainment Technology | Pittsburgh, PA | May 2010

RICE UNIVERSITY

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

PRESENTATIONS

SXSW 2017

“Can a Film Made by a Machine Move You?”

SIGGRAPH EXHIBITION 2016

“Houdini Pipeline Integration and Arrow VFX Breakdown”

ORGANIZATIONS

VISUAL EFFECTS SOCIETY

Awards Committee Member | Chair of Ballot Software Sub-Committee | Nov 2014 - Current

- Developed and administrated digital ballot software for the annual award nomination event that reduced time taken with paper ballots distribution, collection, and tabulation by 90%.

FOREIGN LANGUAGE SKILLS

- Intermediate Japanese

TECHNICAL SKILLS

- **Programming Languages:** Python, C++, C#, MEL, VEX
- **ML, Generative AI, and LLMs:** Anthropic Claude Code, OpenAI Codex, Google Gemini, Nano Banana, Meshy AI
- **Real-time Engines:** Unity, Unreal Engine 5, Godot
- **Rendering APIs:** DirectX12, OpenGL
- **VFX Software:** Houdini, Maya, Nuke, V-Ray, Mantra
- **VFX APIs:** Shotgun, Shotgrid, PySide, PyQt