James Sweeney

Senior VFX and Virtual Production Leadership

Generative AI Production Technology and R&D

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VFX and virtual production leader with 18 years across feature film, AAA games, and real-time production, including a recent contract at Amazon MGM Studios / AI Studios spanning work on two feature films and generative AI R&D. Experience in artist supervision, custom software tooling development, production pipelines, creative team training, and cross-functional coordination. Evaluates emerging tools for production viability, visual consistency, and downstream integration.

Professional Experience

Amazon MGM Studios / AI Studios

Jun 15, 2026 - Sep 25, 2026

Generative AI / VFX | Contract assignment

Culver City, CA

- Contributed to two feature films during a contract assignment; conducted GenAI/VFX R&D in the final phase, evaluating cinematic character, environment, and plate workflows for production viability and visual consistency.
- Developed custom Python/Electron tooling for generative AI production workflows, including clip-duration preparation, plate cropping, and reintegration of generated footage.
- Compared live-action-driven and fully AI approaches, assessing workflow tradeoffs and the consistency of generated results.
- Documented workflows and findings; collaborated with artists, supervisors, and engineers on production technology and workflow improvements.
- Presented R&D findings to production stakeholders to support evaluation of emerging production approaches.

Sweeney Design Studio

Jan 2026 - Present

Owner & Principal Consultant

Los Angeles Metro / Remote

- Evaluate and integrate generative AI tools for film, TV, and games; develop virtual production pipeline strategy, Unreal Engine workflows, and ComfyUI-based automation.

ZeniMax Online Studios (ZOS)

Nov 2023 - Nov 2025

Lead Outsource Environment & Hard Surface Art Manager

Remote

- Directed global outsource pipelines for environments, props, vehicles, and weapons on a large-scale AAA MMO in Unreal Engine.
- Developed Python automation for asset processing and review; established technical standards, validation workflows, Perforce depot structures, and documentation for distributed teams.

Universal Content Productions / Apple TV+

May 2023 - Nov 2023

Virtual Art Department Lead | *Metropolis* - Contract

Los Angeles Metro / Remote

- Led asset management, QC, and deployment for a large-scale Unreal Engine 5 virtual production environment; authored Python tools for publishing and scene organization across Maya and Unreal.

Halon Entertainment / NEP Virtual Studios

Jan 2022 - May 2023

Virtual Art Department Supervisor

Remote

- Supervised up to 15 artists across broadcast, film, commercial, and demonstration projects; delivered an ESPN virtual broadcast environment for live LED volume production.
- Collaborated with NEP sister companies across shared virtual production infrastructure.

Professional Experience Continued

Double Negative (DNEG)
Sep 2020 - Dec 2021
Virtual Art Department Supervisor
Remote

- Supervised VAD operations bridging traditional CG pipelines and Unreal Engine virtual production on *Masters of the Air*, *Avatar: The Last Airbender*, and *Bullet Train*.
- Served as primary liaison with Dimension Studios; championed a VPN tunnel for secure cross-company pipeline access and advocated for ShotGrid SDK integration on Windows.
- Trained an entire previs department in Unreal Engine workflows during active production; introduced MetaHuman-based character workflows.

Happy Mushroom
Mar 2020 - Sep 2020
Virtual Art Department Supervisor | Contract
Remote

- Supervised VAD teams across broadcast and feature film projects, including *Black Adam*.

Various Productions
Nov 2018 - Mar 2020
Virtual Art Department & Environment Artist
Los Angeles

- The Third Floor (May 2019 - Dec 2019): developed LED volume environments for all eight episodes of *The Mandalorian* Season 2.
- Halon Entertainment (Nov 2018 - Mar 2020): VAD work on *Mouse Guard* and *Black Adam*; contributed to early virtual production pipeline development.

Lightstorm Entertainment
Feb 2017 - Jun 2018
VAD & Environment Artist
Remote

- Worked in the Virtual Art Department on *Avatar: The Way of Water*, *Avatar: Fire and Ash*, and *Avatar 4*; used Weta Digital proprietary Lumberjack and Gazebo tools for VAD production.

Digital Domain 3.0
Jun 2014 - Jun 2015
Previs / VAD Artist
Los Angeles

- Contributed VAD and previs work on *The Jungle Book* and *Ready Player One*.

Scanline VFX
Mar 2011 - Jul 2013
Integration Lead
Los Angeles

- Led 4-5 integration artists managing outsourced tracking, matchmoving, and layout. Credits include *The Avengers*, *Iron Man 3*, *Thor: The Dark World*, *Man of Steel*, *Captain America: The Winter Soldier*, and *Rise of an Empire*.

Selected Technology and Workflows

GenAI tools and models: ComfyUI, Midjourney, Runway, Higgsfield, Seedance 2.5, Weavy.

Production: Unreal Engine 4/5, Maya, Houdini, ZBrush, Substance Painter, Python.

Pipeline: Custom software tooling development with Python; ShotGrid/Flow, Perforce, Confluence; asset validation, ACES-aligned color pipelines, LED volume environments, and digital twins.

Education

B.A. Film Production / Cinematography | San Francisco State University | 2003