

# YUNYI ZHANG

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## PROFESSIONAL EXPERIENCE

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**More VFX, Pipeline Technical Director & Light Technical Artist, Beijing, China** Jun 2024 - Present

- Architected 3 procedural lighting systems and 8 Houdini tools, enabling 11 lighting artists with art-directable controls and faster iteration on complex light rigs
- Established a production-ready Karma rendering pipeline, defining standardized workflows and delivering 7 custom render-support tools to accelerate FX rendering and compositing handoff across 30+ shots
- Implemented denoising and render-layer shuffling workflows for Arnold and Karma, reducing EXR memory footprint and render cost by ~40%
- Built a scalable data authoring system using gRPC and Fileseq, supporting collaboration across 5 departments; deployed Prometheus monitoring and custom logging to manage high-volume I/O for 70+ artists
- Led USD asset validation and final render quality reviews across 10 shows, ensuring dependency integrity, visual consistency, and pipeline stability
- Automated Houdini-based grooming data delivery from Asset to Character Effects department, reducing manual handoffs and improving downstream data reliability

**DreamWorks Animation, Crowds Technical Director, Glendale, CA** Sep 2022 - Dec 2023

- Developed and productionized 15+ Python and VEX tools for Houdini crowd simulation and animation, supporting 2 feature film productions
- Optimized Houdini crowd simulation workflows with scalable LOD systems, achieving a 33% render speed gain across 11 sequences and contributing to a 4-month schedule acceleration
- Integrated Character Effects enhancements into crowd characters, enabling memory-efficient, photorealistic feather additions for 10 bird variants across 17 sequences
- Designed and deployed an automated notification and data-handoff system for Crowds pipeline, reducing manual coordination and lowering production management overhead by ~30%
- Coordinated cross-department R&D between Animation and Lighting, driving adoption of 10+ tools into the Crowds pipeline

**BATS-TOI, Unreal Developer & Motion Capture Assistant, New York, NY** Apr 2022 - Aug 2022

- Conducted user-preference and gameplay research with designers and product leads, shaping avatar features and procedural asset strategies
- Implemented a cloud-based Unreal Pixel Streaming pipeline on AWS using C++ and shell scripting, enabling real-time web broadcast of 7 high-fidelity characters
- Built a avatar customization system in Unreal Blueprints, supporting 11+ wearable and animation options to increase player engagement
- Authored 10-page technical design documentation covering server setup, procedural art workflows, and UI iteration
- Directed 12 Xsens motion-capture sessions, supporting animation data acquisition and cleanup

## SKILLS

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**Programming Languages:** Python, Vex, C/C++

**DCC & 3D Tools:** SideFX Houdini, Unreal Engine 5, Autodesk Maya, Nuke, Arnold

**Frameworks:** Universal Scene Description (USD), PySide

## WEBSITES

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**Technical Art Showcase**

<https://www.yunyizhangtechart.com/>

**Personal Art Website**

<https://www.yunyievinzhang.com/>

## EDUCATION

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**University of Southern California, GPA: 3.5/4.0 Los Angeles, CA**

Aug 2022 - May 2024

*Master of Science, Computer Science (Multimedia and Creative Technologies)*

**New York University, GPA: 3.9/4.0 New York, NY**

Aug 2018 - May 2022

*Dual Degree: Bachelor of Arts, Computer Science, and Bachelor of Fine Arts, Film and Television (Tisch School of the Arts)*