Felicity Yick

Senior Technical Artist · AI Creative Tools · Pipelines

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EXPERIENCE

Meta Reality Labs
Jan 2025 – Present

Technical Artist (Contract through Magnit) · San Francisco Bay Area (Hybrid)

AI-native game creation platform

- Building a mobile game creation platform on frontier models where **making the game is the game**: creators co-create with an assistant agent inside the running game instead of a traditional editor.
- Co-architected the **runtime that makes co-creation possible**: multi-agent orchestration that generates gameplay, assets and tools on demand, with context-aware model pipelines deciding what the agent sees and can act on.
- Co-developed the **runtime tooling framework** (tool schemas, CLI, automated tests) that models use to generate in-game tools, asset editors and planning surfaces as creators need them, with permission requests as a guardrail.
- Connected agents to **procedural asset generators** and asset pipelines through MCP servers and tool APIs, so creators get editable, structured assets instead of one-off generations.
- Built an **A/B experimentation framework** testing agent features against creator outcomes, and the reliability layer (checkpoints, crash recovery, watcher agent) for multi-day agent runs.

Immersive Home · shipped at Meta Connect 2025

- Productionized Unreal Engine 5.1/5.5 asset pipelines (Python, C++, Blueprints) for artists and vendors: OpenUSD export with LODs, lightmap baking tuned for standalone VR, texture packing and atlasing, and PBR/unlit material baking. **Cut per-environment turnaround from ~4 months to ~1.**
- Owned art ingestion, optimization, shaders and materials for five environments within strict Quest 2/3 performance and memory budgets, **reducing package size by ~25% and frame time by ~30%**.

TikTok
Aug 2022 – Dec 2024

Mid-Level AR Interactive Engineer · San Francisco Bay Area

- Core engineer on Effect House's **"Create with AI"**: a modular TypeScript framework that turns a prompt into visual-scripting game logic. **10K+ AI-generated effects**, mostly from first-time creators.
- Shipped **50+ AR effects** for organic and branded campaigns (DreamWorks, Met Gala 2024) reaching **10M+ users**, with shader work and optimization for strict mobile performance limits.
- Lead speaker at TikTok's first Open House; demos at conferences and hands-on support for the global creator community.

PROJECTS

Houdini MCP server (open source) — Python · MCP · Houdini

- **30 tools** that let Claude inspect a live Houdini scene, edit it with guardrails (backups, dry runs, undo that stops at the artist's own edits, scoped writes) and render and check its own work.

Painted Ladies: Procedural SF Street — Houdini · VEX · Solaris/USD · Karma · MaterialX

- Procedural Victorian house HDA (**96 parameters, three architectural styles**) and a street system that lays any row of houses down a hill. Built about half by hand, then iterated with Claude through my MCP.

Synthetic Street Data — Solaris/USD · Karma AOVs · Python · COCO

- Turned the street into a labelled dataset generator: per-pixel class and instance labels, depth, normals, 3D boxes and camera intrinsics across seeds × cameras × lighting, with automatic QA.

SKILLS

AI & Agents: Multi-agent orchestration, MCP, tool use, context engineering, agent memory, evaluation, A/B testing, Claude Code, Codex

Engineering: Python, C++, TypeScript, JavaScript, React, GLSL, Blueprints, APIs, Git, Perforce, testing, Linux

Graphics: OpenUSD, Unreal Engine, Houdini (VEX, Solaris, Karma), MaterialX, shaders, lightmapping, optimization, Maya

EDUCATION

University of Pennsylvania · B.S.E. Computer Graphics · GPA 3.84 · 2022
Co-President, ACM SIGGRAPH chapter · TA: Computer Graphics, 3D Modeling