

# LILING LIU

## AI & Automation Engineer | Senior Technical Artist

0928-337916 | liling5731@gmail.com | www.lilingliu.com

### OBJECTIVE

AI & Automation Engineer and Senior Technical Artist with 8+ years of experience across Technical Art, game development, animation, film, interactive exhibitions, and digital content production. Core expertise includes 3D animation, character rigging, Unity / Unreal integration, asset optimization, DCC pipeline development, and production tool development, with recent expansion into AI tool development, full-stack system integration, workflow automation, solution design, and technical solutions. Experienced in bridging Art, Engineering, AI, and Production needs, from requirement breakdown, technical feasibility assessment, system architecture, prototyping, and tool / pipeline development to AI Agents, voice and image generation workflows, model / API selection, cost and ROI evaluation, and timeline / resource planning. Skilled at translating ambiguous creative or business requirements into practical, maintainable, scalable, and reusable technical solutions and production workflows that improve content production efficiency, technical feasibility, and project delivery quality. Looking to continue combining my Technical Art background, software development capabilities, and AI application experience to help teams build digital production workflows and technical solutions that balance creativity, technical feasibility, and real-world production efficiency.

### WORK EXPERIENCE

#### Senior Technical Artist / AI & Automation Engineer, Cool Creative, Taipei, Taiwan August 2025 – Present

**Projects:** 2025 Hon Hai Tech Day (HHTD25), 2026 Foxconn Smart City Expo, Fubon Securities New Website / App AI Pro, Cool Creative Xinsheng Store Saleskit, Be the Beast: Chih-Chieh Lin Basketball Career Exhibition, Unannounced Projects

- Led the planning and development of multiple internal AI products and automation tools, including AI planning / storyboard tools, Image Generator, Social Post Generator, AI video editing, presentation generation, AI voice / singing generation, AI translation, Whisper speech-to-text, image-to-video, and desktop notification systems. Covered the full process from requirement analysis and prototyping to implementation and internal adoption, reducing repetitive work and improving content production efficiency.
- Integrated Claude CLI, OpenAI API, LLM workflows, and AI Agent-assisted development into production workflows for requirement breakdown, code generation, debugging, documentation, rapid prototyping, technical validation, and internal system iteration, accelerating the development and delivery of AI tools, full-stack features, and automation workflows.
- Built cross-tool AI Content Automation Pipelines that integrated content generation, asset processing, quality checks, scheduling, publishing, and audience interaction into reusable workflows. Connected AI Agents, model services, video upscaling, speech recognition / translation, multi-platform publishing, automated replies, influencer marketing support, and scheduling modules to reduce manual tool switching and repetitive operations.
- Contributed to planning, Solution Design, and technical proposals for game, interactive installation, AI application, and digital content projects. Performed Requirement Analysis, Feature Planning, Technology Research, rapid prototyping, and Technical Feasibility Evaluation, while extending the assessment into System / Workflow Architecture and Business Viability. Selected appropriate APIs, models, batch-processing strategies, fallback mechanisms, data flows, and deployment approaches to translate creative and business requirements into system architectures, production workflows, technical specifications, and executable development solutions.
- Evaluated image, video, voice, and LLM models based on output quality, API / GPU / cloud costs, latency, deployment requirements, and project constraints. Compared third-party APIs, self-hosted models, model training / fine-tuning, and different deployment approaches, and translated technical investment into measurable indicators including labor hours, per-run and monthly operating costs, maintenance costs, delivery timelines, and ROI to support model selection, resource allocation, implementation feasibility, and project pricing.
- Developed cross-platform internal applications and full-stack systems spanning front-end, back-end, local desktop applications, and cloud services using Python, Electron, TypeScript, JavaScript, HTML/CSS, and C#. Integrated Supabase, cloud databases, server APIs, OpenAI API, and third-party AI APIs to build data storage, task management, user workflows, AI job processing, API workflow / orchestration, and backend services supporting internal company tools, marketing systems, exhibition content, and external project requirements. Development was primarily performed on Windows, with hands-on experience packaging, deploying, and maintaining selected tools for macOS and handling cross-platform compatibility.
- Developed production tools and pipeline automation for DCC applications including Maya, Blender, and After Effects, using Python and scripting for workflow automation, batch processing, asset management, data conversion, publishing / output workflows, and production support tools. Converted repetitive art and media tasks into standardized and automated workflows to improve efficiency for artists and content teams.
- Served in a Technical PM / Technical Lead-type integration role, breaking requirements down into Project Scope, functional modules, technical tasks, dependencies, and Delivery Milestones. Coordinated development priorities and resource allocation under limited staffing, schedule, budget, and technical constraints, evaluated technical risks, and tracked progress across prototyping, development, testing, and deployment to drive solution implementation and delivery within real-world constraints.
- Served as a cross-functional technical integrator and problem solver across Art, Planning, Front-end, Back-end, Video, and Project teams, troubleshooting Unity, Python, AI tools, DCC pipelines, full-stack systems, networking, and equipment-related technical issues while converting fragmented requirements into maintainable, scalable, and reusable tools, systems, and pipelines. Also supported internal NAS / network architecture, folder permission management, exhibition equipment architecture, and ERP software / hardware research and implementation evaluation to support project management, data collaboration, content production, and exhibition deployment environments.

#### Technical Artist, GENESIS Wave Film Limited, Taipei, Taiwan

March 2022 – April 2025

**Projects:** METANI (GameFi), Shards of Her(TV Mini-Series), Doubles Match(Movie), Organ Child(Movie), Unannounced Projects

- Owned Technical Art specifications, character rigging, model / animation fixes, animation retargeting, Unity / Unreal asset integration, and performance optimization across multiple game, film, and digital-content projects.
- Researched and integrated Unreal MetaHuman, Facegood, MoveAI, Rokoko, Stable Diffusion, and motion-capture technologies into internal animation, virtual production, and AI-assisted workflows.
- Built prototypes and technical content in Unity / Unreal, including animation, shaders, VFX, and scene integration, and explored HTC VIVE Mars CamTrack integration for virtual production.
- Developed an internal Asset Library GUI with PySide2, a Spine plugin, and Photoshop plugin tools using JavaScript to improve asset management and art-production workflows.
- Collaborated with art, engineering, outsourcing, and project teams to resolve cross-functional production issues, review external asset quality, improve pipelines, and mentor interns / students through academic-industry programs.

## Technical Artist, Reallusion, Taipei, Taiwan

June 2021 – December 2021

**Innovation Development Department:** A passionate team dedicated to animation technology and software development. Simplifying animation production, making the ideas happen and process fun is the coolest thing we can think of.

- Designed specifications, validated functionality, benchmarked, and researched technologies for real-time 3D animation software, improving products, tools, and animation production pipelines.
- Defined internal tool specifications, art workflows, and process documentation while translating requirements across PM, R&D, and Art teams.
- Performed technical and operational feasibility analysis, helping engineers define technical initiatives, validation criteria, and requirement-analysis standards.
- Provided technical support, identified potential art / workflow issues, and proposed executable solutions.

## Technical Artist - Contractor, Amazon Game Studios, Seattle, USA

October 2019 – August 2020

**Projects: CRUCIBLE (AAA Free-to-Play Team-Based Action Shooter)**

- Supported character rigging, skinning / weighting, LOD integration, animation retargeting, and physics / cloth simulation workflows in Lumberyard.
- Handled drop-pod skinning and customizable decals, and reviewed outsourced character and weapon assets.
- Collaborated and iterated with production teams, optimized content performance, and supported a wide range of Technical Art needs.

## Character Technical Artist, IMVU, Redwood, USA

May 2018 – October 2019

- Designed, built, tested, and maintained character / facial rigs, and troubleshoot avatar rigging, skin-weight, and scene-integration issues.
- Developed production tools for the Art team using Python, PyMel, and MEL, and collaborated with engineers on new techniques and workflows for character production.
- Worked with modelers to meet technical requirements and resolved Technical Art issues in the Godot production pipeline.

## Animation Rigger - Contractor, Universal Creative, Los Angeles, USA

January 2018 – February 2018

**Projects: Universal Studios Hollywood Ride: The Secret Life of Pets: Off the Leash!**

- Troubleshoot existing creature / prop rigs and delivered multiple creature and prop rigs, skin weighting, rig optimization, and model corrections.
- Supported animation production documentation and pipeline coordination.

## Technical Artist, T- nexus Studio, San Francisco, CA

June 2017 – December 2018

**Projects: GreedyIsland (Mobile PVP Shooting MOBA)**

- Rigged multiple characters and resolved Unity animation, baked-animation, and FBX export issues.
- Coordinated across Art and Engineering, oversaw art-team task execution, and supported production documentation and budget control.

## Intern Technical Artist, Mind Traveler Design, San Francisco, USA

June 2017 – December 2017

**Projects: PLASMAworlds: BlastBox (VR Prototype)**

- Built a VR prototype using Maya and Unreal, covering creature / plant rigging, animation, FBX export, and Unreal animation troubleshooting.

## Freelance / Contract Technical Artist & Technical Pipeline Developer

May 2016 – Present

- **Ding Yong Culture Creativity Co., Ltd | 2026 Taiwan Lantern Festival in Chiayi – Agricultural Lantern Zone "Light Up Chiayi, Illuminate Taiwan" Commissioned Service Project**
- **Chengtian Humanities Studio | Online Course Production and Platform Publishing Management (Teachify / PressPlay Academy)**
- **Chaosmonger Studio | 《ENCODYA》、《Robot Will Protect You》**
- **Cloudburst Games LLC | 《Castle Breakout》**
- **Kinosys Films | 《KIDDO》**
- **Norman Rockwell Museum & Tony DiTerlizzi | 《Four Freedoms》、《Magic Mirror》**
- **SPYDAWICK / OWINFIFOX**

Long-term freelance and contract experience supporting domestic and international projects across games, animation, film, interactive exhibitions, and online course production. Collaborated with clients across more than 5 countries and contributed to 17+ projects. Experienced in end-to-end production workflows for characters and environments, covering modeling, rigging, animation, technical integration, and game engine implementation, with strong expertise in cross-style character production, Technical Art, pipeline development, workflow optimization, and cross-functional collaboration.

- **Character Rigging:** Designed skeleton structures, skin weights, facial controls, FK / IK systems, auto-rigging modules, and deformation systems, with support for cloth and hair simulation workflows in Maya.
- **Tools & Pipeline Development:** Developed production support tools using Python, PySide, Maya API, and third-party APIs, covering model cleanup, asset organization, batch processing, workflow automation, and AI-generated 3D tools. Integrated the Tripo API to establish workflows connecting AI 3D generation with downstream asset cleanup, adjustment, and production processes.
- **Animation Production:** Created gameplay animations, performance animations, and 2D skeletal character animations using Spine, with experience in animation adjustment, baking / export, retargeting, and game engine integration based on project requirements.
- **Modeling & Texturing:** Created character, prop, and PBR assets using Maya, Substance Painter, and Photoshop, while incorporating AI image generation tools for concept exploration, material references, and visual asset support.
- **Game Engine & Technical Art Integration:** Integrated game art, character animation, and production assets in Unity and Unreal Engine, with hands-on experience in animation controllers, VFX, shader development, asset setup, technical troubleshooting, and cross-functional technical coordination.
- **Video Editing & Course Production:** Produced online course and promotional videos, animation demonstrations, asset organization, subtitle editing, image design, and platform publishing workflows, while also contributing to course content planning, structural organization, and ongoing maintenance.

## EDUCATION

### Academy of Art University, San Francisco, CA

June 2014 – December 2017

Master's Degree, Game Development

### National Changhua University of Education, Changhua, Taiwan

September 2010 - January 2013

Bachelor's Degree, Department of Information Management with a specialization in Digital Content Technology and Management Program

### National Kaohsiung Marien University, Kaohsiung, Taiwan

September 2008 - June 2010

Bachelor's Degree, Department of Information Management

## PUBLISHED

[Interview] 【CG Now What ? 】 Ep 11 From Amazon to talk about Crucible game

Technical Artist Ft Liling Liu on Apple Podcast, Spotify Podcast, SoundOn Podcast

- InCG Media

“How to Create A Joint-Based Skirt Rig with Auto Collisions in Maya” – Tutorial

- Thepoly

“How to Create A Joint-Based Skirt Rig with Auto Collisions in Maya” – Tutorial

- InCG Media

“How to Create A Joint-Based Skirt Rig with Auto Collisions in Maya” – Tutorial

- Lesterbanks

“Learn how to interact with objects that change the color in Maya” – Tutorial -InCG Magazine Issue 37, Taiwan.

## ACHIEVEMENTS/ EXHIBITED

### CG Artists Show

July 2020

KUNSTMATRIX

### The Norman Rockwell VR Experience

- Norman Rockwell Museum 2020
- THE ART TECH PAVILION - The Sausalito Art Festival August 30 – September 2, 2019
- The US Capital building to members of Congress, Washington D.C. March 2019
- Henry Ford Museum in Dearborn, Michigan 2018

### Tony DiTerlizzi's “Never Abandon Imagination” (Magic Mirror)

November 2017

Norman Rockwell Museum

### School of Game Development Spring Show Academy of Art University – San Francisco, CA

- 2018 Rockwell VR Experience May 2018
- 2017 First Place: Technical Art/ Animation - Mutant Monsters May 2017
- 2017 Finalist: Technical Art/ Animation - GreedyIsland\_character/prop Rigging May 2017
- 2016 Finalist: Rigging for Character May 2016

### National Changhua University of Education - Department of Information Management – Changhua, Taiwan

- 2012 Taiwan Glass Gallery Exhibition May 2012
- 2012 First Place - Graduate Project May 2012
- 2012 Excellent Work & Finalist - 3D & Graphic Design May 2012

### 2011 Best IClone Performance Award

January

2011 Iclone4 Award: I3D Animation Competition in Taiwan

## SKILLS

**AI / LLM:** OpenAI API, Claude, AI Agents, Whisper, ComfyUI, Stable Diffusion, Midjourney, Image / Video / Voice Generation, AIGC, Model Evaluation / Training / Fine-tuning, AI Workflow Automation

**Programming / Full-stack:** Python, MEL, PyMel, PyQt, PySide, JSON, XML, TypeScript, JavaScript, HTML, CSS, Kotlin, C#, Electron, Supabase, REST / Server API, Cloud Database

**DCC / Software APIs:** Maya API, MotionBuilder API, Photoshop API, Maya, Blender, After Effects, Photoshop; Tool & Pipeline Automation, Batch Processing, Asset Management, Data Conversion

**GUI Development:** Qt, PySide, PyQt, Jetpack Compose

**Real-time / Technical Art:** Unity, Unreal Engine, Shader, VFX, Performance Optimization, Asset Integration, Technical Art Pipeline

**Rigging:** 3D Character, Creature, Prop, Mechanical, Facial, 2D Rigging; FK / IK, Deformation, Auto-rigging

**Simulation:** Cloth, Hair

**Modeling & Animation:** General 3D Modeling, Animation, Deformation, PBR Asset Production

**Photogrammetry & 3D Scanning:** Agisoft Metashape, RealityCapture, R3DS Wrap 3D

**Motion Capture:** Face & Body Motion Capture; Editing, Cleanup & Retargeting; XSENS, Perception Neuron, Facegood, MOXI

**Production / Solution:** Technical Feasibility, Solution Design, Workflow Automation, Technical PM, Technical Lead Coordination, Resource / Timeline Planning, Cost / ROI Evaluation

**Languages:** Mandarin, English, Taiwanese

## SOFTWARES

- Maya, Zbrush, iClone, Character Creator, MotionBuilder, 2D Spine, QT Designer
- Unreal Engine, Unity, Lumberyard, Game Maker, Godot, Omniverse Create, Omniverse Machinima, Cocos Creator
- Photoshop, Illustrator, Indesign, Dreamweaver, Ulead PhotoImpact, GIMP
- MoveAI, Rokoko, Stable Diffusion, Midjourney, Comfyui, DeepfaceLab, Luma AI, NeRF, Machine Video Editor, ChatGPT
- After Effect, Premiere pro, Ulead VideoStudio Pro
- Shotgun, JIRA, Ftrack, Asana, Trello, Confluence, CGTeamwork
- Motion Capture: XSENS, Perception Neuron ( AXIS Neuron), Facegood, MOXI
- Agisoft Metashape, RealityCapture, R3DS Wrap 3D
- Visual Studio Code, Andriod Studio
- Microsoft Office, Open Office, WPS Office