

# LINGHENG TAO

a.k.a. Tony TAO (He/Him/His)

TECHNICAL ARTIST

Santa Clara, CA 

+1 412 328 9641 

lingheng\_tony\_tao@taotamago.com 

www.taotamago.com 

www.linkedin.com/in/lingheng-tao 

## EDUCATION

### Carnegie Mellon University

#### Bachelor of Arts

Pittsburgh, PA 2017 - 2023

Majored in Architecture

Majored in Computer Science

Minored in Game Design

### Carnegie Mellon University

#### Master of Entertainment Technology

Pittsburgh, PA 2023 - 2025

Concentrated in Programming

Concentrated in Technical Art

## SKILLS

 C/C++/C#

 Computer Graphics

 Physically Based Rendering

 Vulkan / Metal

 Unity ShaderLab Programming

 Realtime Rendering

 Adobe Photoshop/Illustrator

 Autodesk 3DS Max/Revit/Maya

 Autodesk AutoCAD

 Rhino & Grasshopper

 Unity 3D

 Unreal Engine 5

 Maya

 Amplify Shader Editor

 Unity Shader Graph

 Reality Composer Pro

 RealityKit

 Figma

## LANGUAGE

Chinese (Mandarin) Mother-Tongue

English Proficient

Japanese Proficient

## WORK EXPERIENCE

### First Fun Inc.

Technical Artist | 2025.11 - Present

Santa Clara, CA

- Developed Unity shaders and VFX that deliver engaging game experience.
- Optimized graphics overhead, boosted the frame rate from 10FPS to 60FPS.
- Monitor the game performance using Unity Profiler, Android Studio and Xcode.Design and iterate on art assets and related tools, workflow and pipeline with help of multiple AI tools and agents.
- Create and maintain high quality art assets that align with the concept of the game design with AI agents.
- Built tools that significantly reduced friction between artists and engineers.
- Migrate game builds to iOS and maintain the migration pipeline.
- Conduct visual playtests and review visual experience feedback; improve the quality of the art assets accordingly.

### AlterStaff Inc.

Unity Software Engineer Internship | 2025.1 - 2025.5

Remote

- Developed a custom Unity Editor tool to bake lightmaps for procedurally generated maps, significantly streamlining the static lighting workflow.
- Improved rendering performance by profiling with Unity Profiler and Xcode Frame Capture; increased frame rate from 50 FPS to 90 FPS through shader optimization, culling, and draw call batching.
- Authored internal optimization guidelines for Unity and led several technical knowledge-sharing sessions covering HLSL fundamentals, profiling techniques, and rendering optimization strategies.

### Apple Inc.

Graphics Engineer Internship | 2024.5 - 2024.8

Sunnyvale, CA

- Added more than 50 nodes in ShaderGraph of Reality Composer Pro in RealityKit, including utilities, visual effects and texture space functions.
- Created test shaders, unit tests and materials and example visual effects using the newly implemented nodes.
- Developed macOS applications that facilitate the documentation of the node library.

## PROJECT EXPERIENCE

### Bidirectional Path Tracer for CMU Physically-Based Rendering

C++ Graphics Programmer | 2024.4 - 2024.5

- Built a bidirectional path-tracing using Dartmouth Introductory Ray Tracer framework.
- Supported multiple importance sampling and different delta light sources.
- Implemented different material models and supported volumetric rendering.

### Building Virtual World for Entertainment Technology Center

Technical Artist and Programmer | 2023.9

- Implemented visual special effects for materials to dissolve into each other by creating shaders in Unity with ShaderLab and Amplify Shader Editor.
- Programmed the C# scripts for applying visual special effects corresponding to different XR interactions and scene switching.