

Wayne Yip Wen Qian

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WORK EXPERIENCE

Technical Artist

Nov 2020 – Oct 2023

Mighty Bear Games

Project: Mighty Action Heroes – Maya, Unity URP – WebGL, Android

- Established workflows and standards for performance profiling, Python scripting, and VFX creation.
- Organized regular optimization passes on WebGL and Android, maintaining budgets for FPS, memory and loading times across 5 software releases.
- Streamlined character LOD creation process from 3 weeks down to 1 week by developing 4 Maya tools in Python to automate texture baking, skinning, and exporting.
- Created custom shaders in Unity (Shader Graph, HLSL) for characters, environments, and post-processing.
- Developed Blender plugin in Python for artists to rapidly iterate over 5000 image renders across 4 months.

Project: Disney Melee Mania – Maya, Unity URP – iOS, tvOS, macOS

- Managed outsourcers on delivery and iteration of 20+ Disney-Pixar character assets over 18 months.
- Developed procedural scatter tool in C#, streamlining object placement from 1 hour to 15 mins per map.
- Optimized performance on mobile devices with Xcode, bringing low-end iOS devices from 20 to 60 FPS.

Tools Engineering Intern

Jun 2019 – Aug 2019

Toys for Bob @ Activision Blizzard

Projects: Crash Bandicoot 4, Crash Team Rumble – Maya, Unreal Engine 4

- Devised prototype pipeline to simulate Maya physics-based animations in Unreal Engine.
- Created Maya tool in PyMEL to automate setup of dynamic spline IK joints on character rigs.
- Developed Unreal plugin in C++ to calculate setup for physics colliders on character skeletons.

Technical Art Intern

Jun 2018 – Aug 2018

Heavy Iron Studios

Projects: (unannounced) – Maya, Unity, Unreal Engine 4

- Upgraded studio-wide art pipeline from Maya 2015 to 2018, fixing 7 existing tools that crashed on startup.
- Accelerated 3D art team's workflow by developing bookmark system in MEL for proprietary Maya tools.
- Developed Maya tool in Python and PySide to automate FBX animation exports to Unity and Unreal Engine.

EDUCATION

B.S.in Computer Science (Games)

Aug 2016 – May 2020

University of Southern California, Viterbi School of Engineering

SKILLS

Languages: Python, JavaScript (Three.js, React), HTML, CSS, C++, C#, HLSL, GLSL, MEL

Software: Unity, Unreal Engine, Maya, Blender, Xcode, MS Visual Studio, Git/GitHub/Sourcetree, Perforce

Skills: Tool Development, Shaders, Profiling & Optimization, 3D Modeling, Rigging, Animation

CERTIFICATIONS

Three.js Journey Completion – Bruno Simon Completed 93-hour course and tests on three.js and react-three-fiber.	May 2024 – Jul 2024
Machine Learning Specialization – Stanford University, DeepLearning.AI Completed 94-hour course, tests and lab assignments on building and training machine learning models with NumPy, scikit and TensorFlow.	Mar 2024 – May 2024

PROJECTS

Three.js Fish Simulation – Three.js, Node.js, Vite <ul style="list-style-type: none">Simulated fish schooling behavior in three.js using boids procedural animation.Wrote 5 custom shaders in GLSL for fish, caustics lighting effects and god rays.	Jun 2024 – Jul 2024
3D Pixel Art Scene – Maya, Unity URP <ul style="list-style-type: none">Developed 7 custom Unity shaders for characters, VFX and post-processing.Designed, modeled, rigged, textured and animated 3 characters.	May 2024 – Jun 2024
Ginkgo – Maya, Unreal Engine 4 <ul style="list-style-type: none">Managed team of 10 artists as the Art Lead for BAFTA-featured 3D horror game.Developed 4 Maya auto-rigging tools in Python; rigged 4 n-pedal characters.Handled all animation logic and procedural/dynamic animation setup in Unreal.	May 2019 – May 2020

AWARDS

Best Overall Hack, Best Entertainment Hack - Coachella Simulator Developed front-end for Three.js concert experience in 72-hour Caltech hackathon.	HackTech 2020
Best Hack Using eBay API, 2nd Place - Wreck-It Retail Developed front-end for Three.js shopping interface in 72-hour Caltech hackathon.	HackTech 2019
Disney's Best Hack Using Marvel API - Superflick Developed front-end for Three.js Marvel comics reader in 72-hour Caltech hackathon.	HackTech 2018

LEADERSHIP

President, USC SIGGRAPH Student Chapter <ul style="list-style-type: none">Led team of 6 in planning and organizing industry panels and workshops over 1 year.Hosted 6 Maya workshops on 3D modeling, rigging and animation for 50 members.	Jan 2019 – May 2020
Teaching Assistant, USC Game Prototyping <ul style="list-style-type: none">Planned curriculum and graded weekly game assignments with Dr Andy Nealen for classes of 30 students in each semester.	Fall 2019, Spring 2020