# **Sheng Xu**



Hello! I'm Sheng, a Technical Artist with 10+ years of experience across a wide range of projects. I'm skilled in all areas of the 3D and game development pipeline, but my real strength is bridging art and technology. I believe my most important responsibility is ensuring that creative vision never gets lost in today's complex production environments.

I am a force multiplier. I empower creative teams to achieve more than they could have imagined, and enable them to do more, in less time!

Portfolio: artofsheng.com

# **Proficiencies**

#### Maya

- ► Tools/Pipeline Dev/Scripting (Python, MEL)
  - Rigging Tools
  - Pipeline management and integration with external programs.
  - Bespoke solutions
  - Ad-hoc scripting
  - Workflow streamlining
- ► Rigging
- ► 3D Modelling
- ▶ 3D Animation
- ► Dynamics
- ► nCloth
- ► Lighting/Shading/Rendering (V-Ray, Arnold, Renderman)

#### Workflow

- ► Confluence, Jira, Trello
- ► Agile methodology

#### **Source Control**

▶ git, svn, tfs

#### **Technical**

- ► Building computers.
- ► Computer hardware troubleshooting.
- ► Quick learner of new software/technologies.

## Unity

- ► Asset management and integration
- ► Tools development (Editor/Runtime)
- VFX, Particles, Shaders (HLSL, Shadergraph, Compute)
- Prototyping, Gameplay Programming, Systems Planning
- ► Procedural Generation
- ► Animation Systems
  - Mecanim
  - Runtime animation rigging
  - Procedural animation
- ► Cutscenes, Custom Timeline behaviours
- ► UI implementation

## **Unreal Engine**

- ► Asset integration
- ► Effects
- ► Basic working knowledge of Blueprints

#### **Adobe Suite**

- ► Photoshop
  - Javascript for scripts and automation
- ► After Effects
  - Compositing
  - Motion Graphics
- ► Illustrator
- ► InDesign
- ► Lightroom
- ► Premiere Pro
- ► Animate

# **Employment**

### **Studio Squish**

Dec 2023 - Current

## **Lead Developer / Animator**

- ► Developing 'Paper Plague' from ground up.
- ► Planning and creating all systems (editor/runtime tools, designer tools, procedurally generated levels, outfit and customisation systems, achievements, narrative, dialog, cutscenes, accessibility, multiple platform support)
- ► Leading team:
  - Recruitment of team (artist, game designer, audio engineer, project manager).
  - Empowering level design by creating toolsets to streamline workflow based on level/game design language.
  - Direction and leadership: drive vision and balance feasibility with creativity.
  - Organising playtesting, filtering and breaking down feedback into actionable tasks.
  - Developing long term strategy for 'Paper Plague' and its related IP.
- ► Exhibited 'Paper Plague' at AVCon 2025.
  - Directed creation of marketing and exhibition collateral.
  - Special builds tailored for use at an exhibit.

## **Prosper Education**

Mar 2016 - Nov 2023

My role at Prosper Education included a lot of responsibilities and the job description was vast. I started as one of the first 3D Artists, taking on all responsibilities associated with the 3D pipeline, but very quickly took on the Lead Art role due to my previous leadership experience, unique technical skillsets, and initiative. I helped the company scale the Art Team to meet production needs and built the art pipeline from ground up to support this expansion.

#### **Lead Artist**

- ▶ Released and maintained 'RoyalABC World', a live-service 3D open game world for children to explore and learn in. The world contained games, a dynamic and interactive world, and served as a hub to access various offerings from the studio.
- Released and maintained 'RoyalABC Classroom', a platform containing an extensive suite of activities for use in the classroom and at home, all synced with RoyalABC World.
- ▶ Ensured that the artistic vision of my team remained true until final product delivery.
- ▶ Trained new staff on processes, values, internal tools and implementation standards.
- ▶ Run employee reviews. Iterate company processes to reduce workflow friction.

#### **Technical Artist / Pipeline / Tools Development**

- ► Established and maintained a robust pipeline to support a large 2D and 3D Art team to create realtime and non-realtime assets/media. Documentation to support this.
- ► Identified bottlenecks, profiling, optimisation, automation, scripting, tools development, R&D.
- ► Worked with design, tech, sound, education and business teams to plan and implement features and internal tools.
- ► Some notable large systems that I designed or was heavily involved in:

#### **Avatar System**

- Ease of use and expansion of outfits/customisation options by artists/animators.
- Management by designers who do not have access to our authoring tools or the engine (using Google Sheets and other proprietary tools)
- Management of assets for use in-engine and non-realtime purposes (print, marketing, trailers, etc). Updating and previewing assets was simple, and could be done outside of the engine.

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#### **3D Asset Management**

The toolsets I developed allowed 3D Artists/Animators to very simply export their work into the engine with minimal overhead. For example, it might take only seconds to update lists of animations and see the new results in-game.

#### **Realtime Dynamic Songs**

- We developed a system that was able to run animated songs dynamically, tailored to the education requirements of different schools, classes, curriculums, etc.
- The concepts behind this system was presented by a colleague and myself at Unite Singapore 2017.

## 2D Flipbook-style Animation System in 3D

- Due to artistic requirements, I developed a system which allowed Animators to run flip-book style animations on 3D Characters. For example, the expressions of a 3D Character could be rendered using hand drawn frame-by-frame animations.
- This data was seamlessly exported alongside the animation, and read in-engine on import.
- This technology ended up being used for more than just characters.

### **Storybook Rendering Toolset**

- A business requirement of creating several hundred Storybooks for print in a short timeframe came up.
- After evaluation of the timeframe and requirements, I created a toolset for our artists to massively streamline their workflow and automate non-creative processes, allowing us to meet this otherwise impossible deadline.

### Rigging / 3D Artist / 3D Animator

- ► Creating characters (humanoid, animals, stylised, mechanical), environments, props.
- ▶ Layout, modelling, rigging, animation, effects, shaders, lighting, UI, cutscenes.
- ► Rigs were standardised. Rig features were evaluated by animators and I implemented their personal preferences.
- ► Runtime adjustable character proportions.

#### **Royal Wins**

April 2014 - March 2016

#### 3D Artist / 3D Animation / Rigging / Tools Development / Technical Artist

- ► Ensure all technical requirements of game assets (models, animations, textures, 2D assets, in-engine assets) are met.
- ► Export and Integration of 3D assets (models, animations, textures) into Unity.
- ► Working with development team to ensure assets are used as intended and stays true to the original artistic vision.
- ▶ Writing scripts and research to speed up and streamline work flow of the art team.
- ▶ Building character and asset rigs for the animators tailored to their preferences.
- ▶ Lighting, Rendering, Compositing of non-real time 3D material for use in game cutscenes, trailers and other promotional material.
- ► Creation of in-engine assets (particle effects, light maps, post-effects, shaders).
- ▶ Management of the 3D and Animation team in the sister studio in Guangzhou.
- ► Creation of training program and on-site delivery for the 2D, 3D and Animation team in the Guangzhou studio in English and Cantonese.

#### Flying Bark March 2014

#### **3D Artist**

- ► This internship was awarded for the 'Best Animation' at the COFA Annual 2013 for my animation 'Preying Mantis'.
- ► Modelling, texturing and resurfacing assets and characters for 'Tashi'.
- ► Exposure to the processes and workflow of a large and organised studio with multiple concurrent projects.

# **Education**

#### UNSW

2011-2013

## **Bachelor of Digital Media**

- ► Major in 3D CGI and 3D Animation.
- ► Distinction average.
- ► Award winning major project 'Preying Mantis'.

# **Highlights**

## **Exhibited at AVCon**

2025

## **Paper Plague**

- ► Exhibited a beta version of my game, 'Paper Plague', at AVCon in Adelaide.
- ▶ Player feedback was great with non-stop engagement throughout the weekend. Many players returned for repeat sessions.

## Screen Australia Grantee

2024

# Paper Plague

► Created and developed my own game, 'Paper Plague', which was successfully funded by Screen Australia to further development.

## **GMTK Jam Top 20**

2020

## **Shooty Ballz**

- ▶ Created in 48hrs in a team of 2.
- ▶ Worked on design, development and art.
- ▶ Featured as Top 20 out of 5000+ entries.

## Unite Singapore Presenter

2017

## **Using Timeline to Create Dynamic Animation Sequences**

- ► The contents and concepts of the presentation were developed by a colleague and myself at Prosper Education
- ▶ The resulting tools are used in-house to author and run the studio's Dynamic Songs.

# Training Workshop in Guangzhou

2015

## **Royal Wins sister studio Training Worksop**

- ▶ Developed all content myself, tailored to the needs of the company and the identified weaknesses of the other team.
- ► Content included technical and non-technical material, lectures and workshops
- ▶ Delivered in Cantonese and English over 3 days.

# Best Animation UNSW

2013

## **Preying Mantis**

- ▶ Best Animation (COFA Annual 2013) of the entire 2013 cohort of UNSW's Art & Design.
- ► Awarded an internship at Flying Bark.