

Peisen Xu

<https://peisenxu.com> • xps83535135@gmail.com

Education

NANYANG TECHNOLOGICAL UNIVERSITY Singapore
Master of Arts (Research), Art, Design and Media Aug 2020 – May 2022 (expected)
Thesis: **Non-photorealistic rendering of twentieth-century cartoonists' expressiveness in 3D real-time**
Relevant Coursework: Aesthetics, Advanced Interdisciplinary Research in Media

NANYANG TECHNOLOGICAL UNIVERSITY Singapore
Bachelor of Engineering, Information Engineering and Media. cGPA: 4.62 Aug 2016 – June 2020
Thesis: **The Design and Development of a Survival Horror Game: Lydia**
Relevant Coursework:

- EEE: Object-Oriented Programming, Software Engineering, Data Structure & Algorithm, Database System, Multimedia System, Design & Innovation Project
- ADM: Thinking and Communicating Visually, Interactive
- Dean's List 2017
- EEE FYP Challenge 2020 Consolation Prize

STUDY ABROAD: École polytechnique fédérale de Lausanne Lausanne, Switzerland
Multimedia Signal Processing Group with Prof. Touradj Ebrahimi Sept 2018 – Feb 2019
Research Topic: **Towards Modelling of Visual Saliency in Point Clouds for Immersive Applications**
Details:

- In charge of the design of the virtual environment for point cloud inspection
- Implemented the system that optimizes the workflow of conducting subjective evaluation experiments in virtual reality
- Implemented the algorithm for calculating the experiment results

Award: **Top 10% Paper** in International Conference of Image Processing (ICIP) 2019

Experience

UDREAM ENTERTAINMENT Singapore
Technical Artist & VFX Artist Intern June 2021 – Aug 2021

- Worked on the mobile game title "**Paper Heroes: Sky Pirates**"
- Quickly learned the artistic principles of visual effects and enhanced the battle visual effects of the game
- Worked closely with the remote Taiwanese art team as a technical artist. **Facilitated the communication** between Taiwanese artists and Singaporean designers and programmers to revamp the art style of the game.
- Created a custom tool to extend the function of mesh animator for character assets importing.
- Created the VFX shaders running on Universal Rendering Pipeline in Unity that support GPU instancing and multiple visual effect functions.

TUMCREATE Singapore
Junior Research Assistant Feb 2019 – July 2019

- Showcased the company's **autonomous vehicle** product in a mobile headset
- Developed a **usability test** with a **dynamic guidance system** to evaluate the performance of the autonomous vehicle in public transport in virtual reality (HTC Vive and Oculus Go)

LEMNIS TECHNOLOGIES Singapore
Unity 3D Developer May 2018 – Aug 2018

- Designed and developed two interactive and immersive scenarios to showcase the company's virtual reality Varifocal technology in **SIGGRAPH 2018**

Leadership & Activities

CiGA Game Jam 2021

3D Modeler & Level Designer & VFX Artist

Singapore
July 2021

- Created the 3D assets and visual effects in the game “[*Irish Rurouni*](#)”
- Designed the level in the game

Global Game Jam 2021

3D Modeler & Environmental Artist

Singapore
Feb 2021

- Created the 3D assets and environment in the game “[*The Lone Scavenger*](#)”

Undergraduate Research Project (URECA)

Researcher

Singapore
Oct 2017 – May 2019

- Second-year research topic: [Recreating Yunnan Garden](#)
 - Used [photogeometry](#) to map the whole garden and generate the 3D models of the pavilions, stones and monument in the garden
 - Developed [3D real-time walkthrough](#) in Unreal Engine 4
- Third-year research topic: The Design and Development of an [Immersive Adventure Game](#)
 - [Designed the level](#) specifically for virtual reality interaction
 - [Implemented the interaction system](#) in virtual reality; Focused on the usability

Global Game Jam 2020

Music Composer; Story Writer

Singapore
Feb 2020

- Composed background music and sound effects for our game, [Yet Another Repairing Day](#), in 48 hours
- Continued working on the storytelling of the game for three months and published it exclusively on Taptap (A Chinese mobile game app store); [followed by more than 100,000 people](#)

Taptap Game Jam 2017

2D Character Animator

Shanghai, China
Nov 2017

- Designed and animated the 2D main character for the game, [The Decameron](#), in 48 hours
- Published on Taptap; [followed by more than 50,000 people](#)

NTU Cross Talk Concert 2017

Sound Engineer

Singapore
Apr 2017

Skills & Interests

Technical:

(Professional) Unity 3D, Blender, Photoshop

(Proficient) Unreal Engine 4, Premier Pro, After Effect, Audacity

(Strong Interest) Houdini, Spine, Substance Painter

(Skills) C#, Shader Programming, Shader Graph, Tool Programming, Lighting Art, VFX Art, 3D Modelling

Language: Chinese (native), English (fluent), French (beginner)

Laboratory: subjective evaluation, visual analysis, textual analysis

Interests: music, drawing, story-writing