

# SHAOXING WANG

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## EDUCATION

### National University of Singapore

Aug 2022 - Present

Master of Science in Industry4.0 (Computer System).

- Relevant Courses: Statistical Pattern Recognition, Vision Systems Engineering, Real time audio-visual sensing and sense making, Software Engineering on Application Architecture.

### Zhejiang University , College of Computer Science

Aug 2018 - Jul 2022

Bachelor of Software Engineering (CGPA 3.61/4.00)

- Relevant Courses: Mobile Platform Development Technology, Design and Implementation of Ultra-Large-Scale Information System, B/S Architecture Software Design, Advances in Computer Graphics.

## WORK EXPERIENCE

### Game Developer

Mar 2022 - Jul 2022

Booming Tech

- Designed audio system of TPS game, controlling whole sound of scene, and made a good interface for audio engineer convenient to call.
- Optimized game rendering pipeline and introduce logic frame to avoid flickering of players' screen.

### Game Software Engineer

Jul 2021 - Sep 2021

Tencent Holdings, Ltd

- Designed an algorithm for simulating ice melting through typical mesh vertices in Unreal4 and completed mesh data structure in the UE4 engine using red-black tree structure to store vertex information instead of its original linear structure.
- Built a more convenient system of UI components called by Lua language by unifying UI interface through polymorphism and inheritance of object-oriented language.
- Constructed a level prototype through Inverse Kinematics to solve problems when characters go uphill.

## PROJECT & RESEARCH EXPERIENCE

### Research Assistant

Sep 2021 - May 2022

Zhejiang University

- Topic: A deep learning oversampling algorithm for mobile.
- Utilized OpenGL in C++ to reproduce FSR algorithms to compare performance.
- Added MNSS pipeline to specified rendering pipeline of unity and collected training set samples.

### Backend Software Engineer

Apr 2021 - Jul 2021

Zhejiang University

- Topic: Construction of ultra-large-scale information platform and distribution database.
- Created a highly concurrent distributed database for massive data storage using Java.
- Designed an algorithm utilizing Zoo keeper for data distribution between master server and region server to realize disaster recovery and load balancing.
- Specified data structure and package size of metadata transferred between client and server.

### Vr Software Engineer

Apr 2020 - Apr 2021

Zhejiang University

- Topic: Developed an application of natural gesture detection based on Quest2.
- Constructed a VR application for interactive video processing through bare hand gestures.
- Improved image processing algorithm for video in VR context by capturing keyframes.
- Established a gesture interaction system considering finger frequency, differences of hands, and reducing users' learning costs.

## TECHNICAL SKILLS AND PROFESSIONAL CERTIFICATIONS

- Professional Skill: C++, Python, Unreal4, Unity3D, Graphics
- Language: English, Mandarin