

# WEIJIE ZHOU

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## EDUCATION

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### University of Waterloo

Ph.D. in Computer Science

Supervised by Prof. Toshiya Hachisuka

*September 2021 - Present*

### The University of Tokyo

Master in Information, Science and Technology

Supervised by Prof. Toshiya Hachisuka

*April 2019 - March 2021*

### Shanghai Jiao Tong University

Bachelor in Software Engineering

*September 2013 - June 2017*

## WORK EXPERIENCE

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### HUAWEI Tokyo Research Center - Research Internship

August 2019 - June 2021

*GPU Path Tracing Renderer Project, C++, Python, PyTorch, OpenCL*

- developed an interactive GPU-based mobile path tracing renderer and optimized the performance, achieving a performance speedup 2x~3x compared to the legacy renderer.
- utilized a U-net-like autoencoder with temporal information to implement an AI-based denoiser to denoise the 1spp path tracing image and ported the network to mobile NPU, achieving state-of-the-art performance on mobile with interactive fps..

### HUAWEI Technologies CO. LTD - Test Engineer

August 2017 - September 2018

*HUAWEI VR2 Project, C++, C#, Python, Unity, OpenGL ES*

- optimized the VR2 SDK performance by enabling an OpenGL ES extension on Huawei VR2, reducing the draw calls of VR rendering to a half.
- developed an automation test framework, enabling the functional test and stability test to execute automatically.
- developed SDK test tools, reducing the test time for SDK to less than 30 minutes.

### HUAWEI Technologies CO. LTD - Test Engineer Internship

July 2016 - June 2017

*HUAWEI Mate9 Project and HUAWEI VR1 Project, C++, C#, Python, Unity*

- developed a Vibration Module based automation test tool in the hardware abstraction level (HAL) for Mate9.
- developed a Unity-based VR1 automation test tool by mocking the sensor data (quaternion and position).

## TECHNICAL SKILLS

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**Programming Languages:** C++, C#, Java, Python

**Tools:** Unity, OpenGL ES, OpenCL, OpenCV, WebGL, PyTorch, L<sup>A</sup>T<sub>E</sub>X

## LANGUAGES SKILLS

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**Chinese:** native

**English:** business (TOFEL iBT 93/120)

**Japanese:** intermediate (JLPT N1 103/180)