

# GUOWEI (Peter) LU

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## PROFILE

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I got my master's degree at Utrecht University in the Netherlands in 2020. Before that, I was a GIS engineer in China. My research interests include Physically based rendering and virtual earth.

## EDUCATION

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### Utrecht University, the Netherlands

Sep. 2018 – Sep. 2020

M.Sc. in Computer Science, Game and Media

- Relevant Courses: Advanced Graphics, Optimization and Vectorization, Game Physics, Computer Vision, Geometric Algorithm, Motion and Manipulation, Crowd Simulation
- Master Thesis: 'Gradient-Domain Volume Rendering' (grade: 8.5/10)
- GPA: 8.73/10 (graduation with Cum Laude)

### Beijing Forestry University, China

Sep. 2002 - Jun. 2006

B.Sc. in Information Management & Information System

## EMPLOYMENT

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Engineer, R&D Department, SuperMap, Beijing/Chengdu, China

Jul. 2006 - Jun. 2018

- Virtual Earth: real-time massive 3D content rendering in the Browser.
- Map Module: map rendering

## PROJECTS

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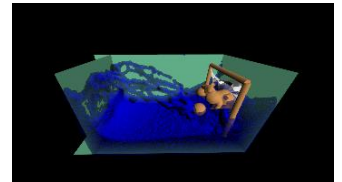
### [SBDPT](#) • C++, CUDA • 2019

A streaming BDPT render system. It supports energy conservation, caustic, and a Optix wavefront pipeline.



### [Fluid Simulation](#) • C++, Compute shader • 2019

Position Based Fluid Simulation. It supports the collision among rigid body, clothes, and fluid.



### [Action Recognition](#) • Python, Keras, tensorflow • 2019

A CNN architecture to classify human actions of the Stanford-40 dataset. It supports data augmentation, transfer learning and automatic model search.



### [Examples for Cesium](#) • JS, WebGL • 2017

A demo gallery of Cesium. It supports vector tile rendering, height map terrain and dynamic data visualization.

For all projects, please visit my [project portfolio](#).

## ACHIEVEMENTS

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Graduation with Cum Laude

2020

Innovation Award (Company, team)

2016/2008

National 3rd prize of National High School Mathematics League

2001

## MISCELLANEOUS

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**Programming Language**

C++, JS, Python, CUDA, WebGL

**Oral & Written**

English(medium, IELTS 7), Mandarin(Native)

**Hobbies**

Physically Based Rendering, Virtual Earth, LEGO