GUOWEI (Peter) LU

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PROFILE

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

EDUCATION

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: 4.0/4.0

Beijing Forestry University, China   Sep. 2002 - Jun. 2006
B.Sc. in Information Management & Information System

EMPLOYMENT

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 PORTFOLIO 🔗

SBDPT • Project • C++, Cuda • 2019
A streaming BDPT render system. It supports energy conservation, caustic, and Optix wavefront pipeline.

**Fluid Simulation** • Project • C++, Compute shader • 2019
Position Based Fluid Simulation. It supports the collision among rigid body, clothes, and fluid.

Action Recognition • Project • 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 • Hobby**,** JS, WebGL • 2017
A demo gallery of Cesium. It supports vector tile rendering, height map terrain and dynamic data visualization.
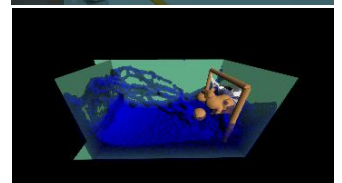
ACHIEVEMENTS

Master's degree with cum laude   2020

SuperMap Innovation Award (Team)   2016/2008

National 3rd prize of National High School Mathematics League   2001

MISCELLANEOUS

Programming Language	C++, JS, Python, CUDA, WebGL
Oral & Written	English(medium, IELTS 7), Mandarin(Native)
Hobbies	Physically Based Rendering, Virtual Earth, LEGO