GUOWEI (Peter) LU

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PROFILE

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

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

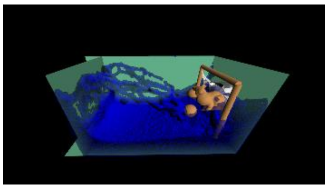
Engineer, R&D Department, SuperMap, Beijing/Chengdu, China Jul. 2006 - Jun. 2018

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

PROJECTS

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

**For all projects, please visit my project portfolio.*

ACHIEVEMENTS

Graduation with Cum Laude	2020
Innovation Award (Company, 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