

Yuguang Lee

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EDUCATION

UNIVERSITY OF WASHINGTON

MSCI IN ELECTRICAL ENGINEERING /
COMPUTER VISION

Expected Dec 2016 | Seattle, WA |
Cum. GPA: 3.75 Mentor: Linda Shapiro

STATE UNIV. OF NEW YORK

MSCI IN GEO-SPATIAL INFORMATION
SCIENCE

August 2014 | Syracuse, NY
Cum. GPA: 3.86

BEIJING UNIV. OF AERONAUTICS & ASTRONAUTICS

BS IN ELECTRICAL ENGINEERING
June 2012 | Beijing, China
Cum. GPA: 85 / 100

WORKING EXPERIENCE

ADOBE CREATIVE TECHNOLOGY LAB | SOFTWARE ENGINEERING

INTERN + RESEARCH

June 2016 – Sep 2016 | Seattle, WA

- Cross-platform Halide-based Image Processing Pipeline (using OpenGL)

RESEARCH

UW GRAPHICS AND IMAGING LAB | RESEARCH ASSISTANCE

Dec 2014 – June 2016 | Seattle, WA

- ICPR 2016 Face Detection Challenge (Rank 5 out of 52 teams)
- Fast mitosis counting from histopathological images using deep learning
- Fast Photon-Mapping based Large Scale Ray-tracing Simulation
- Multi-view Environmental Matting (Raw sensor image data analysis & Graphics)
- Animator and Ray-tracer Implementation with OpenGL (Course Project)
- Zooplankton recognition using deep learning neural network

LINKS

Github:// [RileyLee](#)

LinkedIn:// [yuguanglee](#)

COURSEWORK

GRADUATE

Computer Graphics
Computer Vision
Machine Learning
Artificial Intelligence
Robotics
Spectral Analysis
Advanced Inference in Graphical Models
Probability and Random Process
Geo-spatial Information System
(Research Asst. & Teaching Asst)
Computer Vision

UNDERGRADUATE

Digital Signal Processing
Optics for Engineers
Digital Image Processing
Digital Circuits Design
Principal of Digital Imaging

RESEARCH FOUNDATION OF SUNY | RESEARCH ASSISTANCE & TEACHING ASSISTANCE

Sep 2013 – Aug 2014 | Syracuse, NY

- An iterative linear and non-linear Gaussian decomposition method for waveform LiDAR processing

BEIHANG REMOTE SENSING & OPTO-ELECTRONIC LAB | HEAD UNDERGRAD RESEARCH

Sep 2012 – Jan 2011 | Beijing, China

- GPU-based acceleration for Monte Carlo ray-tracing of complex 3D scene (Computer graphics & CUDA GPU)
- Somatosensory Control Device of the Angry Birds (Embedded system design)

PUBLICATION

In Review: An iterative linear and non-linear Gaussian decomposition method for waveform LiDAR processing Journal: Remote Sensing of Environment (Impact Factor: 7.388)

In Review: FluorWPS: a Monte Carlo ray-tracing model to compute sun-induced chlorophyll fluorescence of three-dimensional canopy Journal: Remote Sensing of Environment

The impact of sensor field-of-view and distance on field measurements of directional reflectance factors: A simulation study for row crops Journal: Remote Sensing of Environment

The impact of sensor field-of-view and distance on field measurements of directional reflectance factors: A simulation study for row crops | Journal: Remote Sensing of Environment

GPU-based acceleration for Monte Carlo ray-tracing of complex 3D scene | Geoscience and Remote Sensing Symposium (IGARSS), 2012 IEEE International A Computer Simulation Model to Compute the Radiation Transfer of Mountainous Regions | Proceeding of SPIE Conference on Remote Sensing 2011

AWARDS

- 2016 top 5/52 ICPR 2016 Face Detection Challenge
- 2012 Third Place in Meixin Memes-based Device Design & Innovation Contest

SKILLS

PROGRAMMING

Over 5000 lines:

C++ • Shell • Python • Matlab • HTML • C • \LaTeX

Over 1000 lines:

CSS • PHP • C++ Library:
OpenGL(GLSL) • OpenCV • Caffe
• Halide • Qt