Yuguang Lee

http://homes.cs.washington.edu/~ylee3/YuguangLee/website.html
ylee3@cs.washington.edu | 315.897.7889

EDUCATION

UNIVERSITY OF WASHINGTON
MSc in Electrical Engineering / Computer Vision
Expected Dec 2016 | Seattle, WA | Cum. GPA: 3.75 Mentor: Linda Shapiro

STATE UNIV. OF NEW YORK
MSc 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

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-sptital 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

SKILLS

PROGRAMMING
C++ • Shell • Python • Matlab • HTML • C • LaTeXCSS • PHP •
C++ Library:
OpenGL(GLSL) • OpenCV • Caffe • Halide • Qt

WORK 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
- cvpr2016 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 on vegetation fluorescent effect
- 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

RESEARCH FOUNDATION OF SUNY | Research Assistance & Teaching Assitance
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), submitted on Oct 11, 2016
- In Review: FluorWPS: a Monte Carlo ray-tracing model to compute sun-induced chlorophyll fluorescence of three-dimensional canopy Journal: Remote Sensing of Environment, submitted on Apr 19, 2016
- 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, Jan 2015
- 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 cvpr2016 Face Detection Challenge
2012 Third Place in Meixin Memes-based Device Design & Innovation Contest