Yuguang Lee

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EDUCATION

UNIVERSITY OF WASHINGTON
MSc in Electrical Engineering - Computer Vision
Expected March 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**

SKILLS

Programming Language
C++ • Python • C • Java • Shell
CSS • PHP • Javascript • HTML
Matlab
Tools & Library:
Git • SQL • Qt • OpenGL
Halide • OpenCV • Caffe • LaTex

COURSEWORK

GRADUATE
Machine Learning
Artificial Intelligence
Computer Graphics
Computer Vision
Probability and Random Processes
Principles of Robotic Manipulation
Geo-sptital Information System
Advanced Inference in Graphical Models

UNDERGRADUATE
Data Structure & Algorithm
System Programming
Digital Image Processing
Digital Signal Processing
Optics for Engineers
Principal of Digital Imaging

WORK EXPERIENCE

ADOBE CREATIVE TECHNOLOGY LAB | Software Engineering Intern + Research
June 2016 – Sep 2016 | Seattle, WA
- Cross-platform Halide-based Image Processing API (Qt, OpenGL, Halide)

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
- Realistic Facial Expression Generation and Rendering

RESEARCH FOUNDATION OF SUNY | Research Assistance & Teaching Assitance
Sep 2013 – Aug 2014 | Syracuse, NY
- An iterative 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
- FluorWPS: a Monte Carlo ray-tracing model to compute sun-induced chlorophyll fluorescence of three-dimensional canopy Journal: Remote Sensing of Environment, Remote Sensing of Environment 187 (2016): 385-399
- 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