

ZHENG RONG WANG

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seanzw.github.io

EDUCATION

Tsinghua University, *Department of Electronic Engineering*
Bachelor of Engineering in Electronic Engineering
GPA: 91/100

Beijing, P.R. China
Aug. 2012 - Jul. 2016(expected)

ETH Zürich, *Department of Information Technology*
Exchange Student, International Academic Program
GPA: 5.50/6.00

Zürich, Switzerland
Sept. 2014 - Feb. 2015

PROFESSIONAL & PERSONAL SKILLS

Mathematic: Familiar with calculus, linear algebra, probability theory, discrete mathematics, algorithms.

Computer Capability: Skilled at C/C++, Python, MATLAB.

Language Proficiency: English: Toefl 114; German: B1 Level(MCER).

SELECTED PROJECTS & INTERNSHIPS

Yart-cpp, yet another ray tracer in C++

Sep. 2015 - Present

- Implement direct lighting and bidirectional path tracing.
- Lambertian, specular, refraction and Cook-Torrance BRDF are supported.
- Use OC-Tree to accelerate complex mesh.
- Repo: <https://github.com/seanzw/yart-cpp>

OpenCL@FPGA

Sep. 2015 - Present

- Explore OpenCL on Xilinx Alpha Data FPGA.
- Use OpenCL to implement CNN on FPGA.
- Supervised under Prof. Fei Qiao.

MicroPython on FPGA, Dept. EEE, Imperial College London

Jul. 2015 - Aug. 2015

- Supervised by Prof. Peter Y. K. Cheung, Head of Dept. EEE.
- Port MicroPython on Altera DE0-Nano-SoC FPGA.
- Build FFT example with DMA.
- Repo: <https://github.com/seanzw/MicroPythonFPGA>

Computer Vision Engineering Internship, DeepGlint, Beijing

May. 2015 - Jun. 2015

- Work in the computer vision group to develop a skeleton recognition system.
- Use OpenGL to develop a "mirror" demo.

Computer Graphics in ETH Zürich

Sept. 2014 - Dec. 2014

- Use JavaScript and WebGL to implement computer graphics technologies.
- Ray tracing, normal mapping, BRDF, Perlin noise, B-Spline, etc are implemented.
- Demo: <https://seanzw.github.io/ETHZ-CG-2014>

AWARDS AND HONORS

Second-class Scholarship for Excellent Freshmen, *Tsinghua University*

Oct. 2012

Wang Zhaosheng Scholarship for Excellent Student from Dongguan, *Wang Zhaosheng Foundation*

Oct. 2012

Second Prize in 30th Chinese National Physics Contest(non-physical group A)

Dec. 2013

Ranked No.5 in National Matriculation Test(Science), Guangdong Province (5/600,000)

Jun. 2012

Courses in CS

- Compilers by Alex Aiken, Stanford University
- Operating System Engineering, MIT
- Programming Languages by Dan Grossman, University of Washington
- Machine Learning by Andrew Ng, Stanford University
- Algorithms Part I & II by Robert Sedgewick, Princeton University
- Introduction to Computer Science and Programming, MIT
- Introduction to Probability, MIT
- Advanced Computer Graphics, Tsinghua University
- Computer Networks, Tsinghua University
- Software Engineering, Tsinghua University
- Computer Graphics (5.25/6), ETH Zurich
- Computer Vision (5.5/6), ETH Zurich

Children Education Program Volunteer, *Dream a Dream, Bangalore, India*

Jul. 2013 - Sept. 2013