

YIHENG ZHANG

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SUMMARY

I'm an undergraduate student currently studying in Shanghai Jiao Tong University (SJTU) majoring in computer science and will achieve my Bachelor degree in Jun. 2019. Since Sept. 2015, I've been a member of Zhiyuan Honor Program of Engineering which belongs to Zhiyuan College (independent research-oriented college in SJTU).

My research interests basically lie in Computer Graphics and Vision. Most of my recent research is related to global illumination while a bunch of other topics remain attractive to me, including geometric modeling, texture simulation, scene reconstruction, 3-D vision and animation. Currently, I am working on Deep Learning based rendering denoise.

EDUCATION

B.S. in Computer Science and Engineering School of Electronic Information and Electrical Engineering Shanghai Jiao Tong University, Shanghai, China Overall GPA: 90.87/100, Major GPA: 93.90/100	September 2015 - June 2019 (Expect)
Zhiyuan Honor Program of Engineering (top 4%) Zhiyuan College Shanghai Jiao Tong University, Shanghai, China Honor Course GPA: 90.46/100	September 2015 - June 2019 (Expect)
Exchange Undergraduate (top 1) School of Engineering University of Melbourne, Victoria, Australia Course Grade: H1	June 2017 - July 2017

RESEARCH EXPERIENCE

Lab of Digital Media and Data Reconstruction Shanghai Jiao Tong University, Shanghai, China Advisor: Lizhuang Ma (Distinguished Professor) Research Topic: global illumination, texture alignment and more CG related optimization	February 2017 - Present
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PUBLICATIONS

Light Transport Simulation via Generalized Multiple Importance Sampling <i>Qi Liu, Yiheng Zhang, Lizhuang Ma - CVM 2018 Oral</i>	November 2018
<ul style="list-style-type: none">· A generalized multiple importance sampling in global illumination· Improved the efficiency of vertex connecting and merging algorithm by about 21%	

SELECTED PROJECTS

Interactive Object Selection Based on U-Net <i>Computer Graphics Course Group Project</i>	October 2017 - January 2018
<ul style="list-style-type: none">· Project ranked top 1%· An open-source interactive solution for object selection (source)· Increase accuracy by 15.91% on salient object compared with <i>Deep Interactive Object Selection (CVPR 2016)</i>.	
Simple Path Tracer <i>Computer Graphics Course Individual Project</i>	November 2017

- Scene built and core algorithm implemented by myself, mathematical utilities courtesy: [SmallVCM](#)
- Reflection, refraction and Phong are included

Isochart-based Auto Geometry Mesh Cutting and UV Alignment

April 2017 - June 2017

Lab of Digital Media and Data Reconstruction Project

- An interactive approach to generate UV alignment of object mesh charts
- Implemented a 3Ds Max plug-in for a VR-company

LANGUAGE & SKILLS

English Proficiency	TOEFL score:113 (R:30, L:29, S:24, W:30)
Programming Language	C++(primary), Python(good), Matlab(familiar), LaTeX(good), MySQL(limited), HTML/CSS(familiar), JS(limited)
Software	Microsoft Office, Visio; Adobe Photoshop, Illustrator, Premiere; Maya

HONORS

Meritorious Winner MCM/ICM Mathematical Contest in Modeling	January 2017
Zhiyuan Honor Scholarship Zhiyuan College, Shanghai Jiao Tong University	December 2017
Wish Scholarship (top 3%) Wish Ltd.	September 2017
Zhiyuan Honor Scholarship Zhiyuan College, Shanghai Jiao Tong University	December 2016
Tung OOCL Scholarship Scholarship (top 6%) The Tung Foundation & Orient Overseas Container Line Ltd.	October 2016

EXTRA-CIRRICULAR

Vice Director of Department of Publicity <i>Student Union of SEIEE</i>	May 2016 - September 2017
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- Responsible for publicity works of events held by SEIEE (School of Electronic Information and Electrical Engineering)
- Hold monthly workshop to give presentation of new designing trend

President <i>SJTU Band Union</i>	September 2017 - Present
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- Head director of several campus rock shows
- Assistant director of SJTU Oasis music festival
- Contributed to a audio technology guidance website (on my github)

Hobbies

- Guitarist/Composer on a metal band
- Calligraphy grade 8 (max 10, China Calligrapher Association)
- 9 year painting learning experience