

Guanying CHEN

Last updated: January 2019

CONTACT INFORMATION	CB411, Chow Yei Ching Building Department of Computer Science The University of Hong Kong Hong Kong	Mobile: +852-91490974 E-mail: GoYchen@foxmail.com Homepage: www.gychen.org
RESEARCH INTERESTS	3D Reconstruction, Physics-based Vision, and Environment Matting	
EDUCATION	The University of Hong Kong (HKU) Ph.D. Candidate, Computer Science • Supervisor: Prof. Kenneth K. Y. Wong	Hong Kong SAR, China Sept 2016 - Present
	Sun Yat-sen University (SYSU) B.Eng. Automation • GPA: 92/100 (4.2/5.0); Rank: Top 1%	Guangzhou, China Sept 2012 - Jun 2016
PUBLICATIONS	[Peer-reviewed Papers] <ol style="list-style-type: none">2. Guanying Chen, Kai Han, Kwan-Yee K. Wong, <i>PS-FCN: A Flexible Learning Framework for Photometric Stereo</i>, European Conference on Computer Vision (ECCV), Munich, Germany, 2018.1. Guanying Chen*, Kai Han*, Kwan-Yee K. Wong, <i>TOM-Net: Learning Transparent Object Matting from a Single Image</i>, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Salt Lake City, USA, 2018 (Spotlight Presentation). (* equal contribution).	
RESEARCH EXPERIENCE	SenseTime Group Limited <i>Computer Vision Intern Researcher</i> • Project: Proposal-Based Indoor Object Detection • In this project, we aimed at implementing an indoor object detector for indoor robot navigation, following the idea of Faster R-CNN. We scraped indoor images from search engines and organized people to label the ground truth bounding box. To increase the robustness of the Faster R-CNN, we enhanced the model with Online Hard Example Mining (OHEM). At the end of the internship, the trained object detector was encapsulated in an Android SDK. • Supervisor: Dr. Wei Zhang and Dr. Yu Lu	Shenzhen, China Jun 2016 - Aug 2016
	Human-Cyber-Physical Intelligence Integration Lab, SYSU <i>Undergraduate Research Assistant</i> • Project: Semantic Image Segmentation with Deep Neural Network • Semantic image segmentation is a high level vision task which relies on both local and context information. In this project, we proposed a novel deep learning framework to simultaneously utilize the powerful feature extraction capacity of CNN and context modeling ability of LSTM. The proposed model achieved promising results on the Pascal VOC benchmark. • Supervisor: Prof. Liang Lin	Guangzhou, China Oct 2015 - May 2016
	Department of Computer Science, The University of Hong Kong <i>Summer Research Intern</i> • Project: Scene Text Recognition with Deep Convolutional network • In this project, we reproduced the state-of-art results achieved by the CNN based text recognition algorithm. The model was trained on synthetic data and validated on the challenging real data. Our implementation was based on Caffe. • Supervisor: Prof. Kenneth K. Y. Wong	Hong Kong SAR, China Jul 2015 - Aug 2015

TEACHING
EXPERIENCE

Department of Computer Science, The University of Hong Kong

Teaching Assistant

- COMP7404 Computational Intelligence and Machine Learning 2016 - 2017 Fall

TECHNICAL SKILLS

- Programming Language: Python, C/C++, Lua, Matlab, Shell, C#, etc;
- Programming Environment: Linux + Vim + Tmux + Git + Makefile + Pdb/Gdb + SSH;
- Tools: PyTorch, Torch7, Caffe, Mitsuba, POV-Ray, OpenCV, Libsvm, Meshlab, L^AT_EX, etc;
- Language: Mandarin and Cantonese (native speaker), English (working proficiency).

PROFESSIONAL
SERVICES

- Conference Reviewer: CVPR 2019, ICCV 2019.
- Journal Reviewer: Pattern Recognition.

AWARDS

- University Postgraduate Fellowship (UPF) HKU (2016-2020)
- Postgraduate Scholarship (PGS) HKU (2016-2020)
- Outstanding Graduate SYSU (2016)
- Outstanding Student Scholarship SYSU (2013, 2014, 2015)