Shao-Hua Sun

CONTACT
INFORMATION

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EDUCATION

University of Southern California, CA, USA
Annenberg Fellow,
The Department of Computer Science,
The USC Viterbi School of Engineering
- Advisor: Joseph J. Lim

National Taiwan University, Taipei, Taiwan
Bachelor of Science in Electrical Engineering
- GPA: 3.9/4.0
- Advisors: Shao-Yi Chien and Yung-Yu Chuang

RESEARCH
INTERESTS

Computer Vision and Machine Learning
Deep Learning, Reinforcement Learning, and their applications to Computer Vision

PUBLICATIONS

Shao-Hua Sun*, Hyeonwoo Noh*, Sriram Somasundaram, and Joseph J. Lim, *Neural Program Synthesis from Diverse Demonstration Videos*, International Conference on Machine Learning (ICML) 2018.

Shao-Hua Sun, Minyoung Huh, Yuan-Hong Liao, Ning Zhang, and Joseph J. Lim, *Multiview to Novel view: Synthesizing Views via Self-Learned Confidence*, European Conference on Computer Vision (ECCV) 2018.

Shao-Hua Sun, Shang-Pu Fan, and Yu-Chiang Frank Wang, *Exploiting Image Structural Similarity for Single Image Rain Removal*, in IEEE International Conference on Image Processing (ICIP) 2014.

AWARDS

Annenberg PhD Fellowship, University of Southern California
Fellows will conduct cutting-edge communication and digital media research, advance important interdisciplinary programs in the communications arena, and constitute an internationally recognized and highly regarded group of communication research scholars and creative practitioners.

Second Place Award, Signal Processing Cup of ICASSP 2014
The competition was held by International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2014 and the topic included 3D bioimage super-resolution and restoration. Our team was selected to participate in the final round contest and won Second Place Award out of 95 teams worldwide.

Presidential Award (2 times), National Taiwan University, Fall 2013 & Spring 2014
This award is awarded to the top 5% of students enrolled in the Department of Electrical Engineering at National Taiwan University each semester.

Bronze Medal Award and **Outstanding Paper Award**, Altera Innovate Asia Workshop and Design Contest, International Final, Nanjing, China, 2013
The contest is the largest FPGA design contest involved 470+ undergraduate and graduate-level teams worldwide.

RESEARCH EXPERIENCE	**Prof. Joseph Lim's Lab**, *Dept. of Computer Science, University of Southern California* Advisor: Prof. Joseph Lim	Jan. 2017 - present
	Multimedia and Machine Learning Lab, *Research Center for Information Technology Innovation, Academia Sinica* Advisor: Dr. Yu-Chiang Frank Wang	Feb. 2013 - June 2014
	Communication and Multimedia Lab, *Dept. of Computer Science and Information Engineering, National Taiwan University* Advisor: Prof. Yung-Yu Chuang	Feb. 2014 - June 2014
	Media IC & System Lab, *Dept. of Electrical Engineering, National Taiwan University* Advisor: Prof. Shao-Yi Chien	Jul. 2012 - June 2014
WORK EXPERIENCE	**Research Internship**, *Snap Inc.*	Jul. 2017 - Jan. 2018
	Graduate Research Internship, *Computer Vision & Image Analytics Lab, GE Global Research*	Summer 2016
	Research Assistant, *Dept. of Computer Science, University of Southern California*	Jan. 2018 - present
	Research Assistant, *Research Center for Information Technology Innovation, Academia Sinica, Taiwan*	Feb. 2013 - June 2014
	Teaching Assistant, *Dept. of Computer Science, University of Southern California* CSCI-599: Deep Learning and its Applications	Fall 2017
	Teaching Assistant, *Dept. of Computer Science, University of Southern California* CSCI-570: Analysis of Algorithms	Fall 2016
	Summer Internship, *Microsoft Taiwan*	Summer 2012
	Assistant of Enforcement Clerk, *Administrative Enforcement Agency, Ministry of Justice, Taiwan's government*	Jul. 2014 - Jul. 2015

PROGRAMMING SKILLS	Python, Matlab, C, C++, C#, Verilog, and MIPS development
DEEP LEARNING FRAMEWORKS	TensorFlow, PyTorch, Caffe, and Torch
LANGUAGES	English (fluent), Mandarin Chinese (native)
TOOLS	PSPICE, Quartus II, nWave, ModelSim, and Cadence Tools
SELECTED COURSEWORK	Convex and Combinatorial Optimization Advanced Natural Language Processing Digital Visual Effects Digital Video Technology Advanced Digital Signal Processing Advanced Analysis of Algorithms Analysis of Algorithms

References

Dr. Joseph J. Lim
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Dr. Ning Zhang
Senior Research Scientist
Snap Inc.
E-mail: ning.zhang@snapchat.com

Dr. Ser Nam Lim
Director/Senior Principal/Lab Manager
Avitas Systems, a GE Venture/GE Global Research/Computer Vision & Image Analytics Lab, GE Global Research
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