

HONGKUAN ZHOU

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EDUCATION

University of Michigan-Shanghai Jiao Tong University Joint institute (UM-SJTU)

09/2013 - 08/2017

B.S. in Electrical Computer Engineering

Overall GPA: 3.38/4.00 GPA in junior: 3.92/4.00

Rank(in ECE Major): 22/91

University of Southern California (USC)

08/2017 - 05/2019

M.S. in Computer Engineering

GPA: 4.00/4.00

University of Southern California (USC)

08/2019 - Present

Ph.D. in Computer Engineering

WORK EXPERIENCE

Network Management Department, Shanghai Jiao Tong University

09/2013 - 08/2017

Network and Computing Counselor

Shanghai, China

- Responsible for the maintenance of the student-residential computer networks.
- Troubleshooting technical network problems encountered by students and faculty in the entire university.

Lisure Science (Suzhou) Co., Ltd.

04/2015 - 06/2015

Software Engineer Intern

Suzhou, China

- Performed image processing on pictures taken by lab microscopes to track the growth of bacteria to identify optimal conditions for cells living rate.

Lisure Science (Suzhou) Co., Ltd.

04/2016 - 06/2016

Software Engineer Intern

Suzhou, China

- Worked on a project aimed at analyzing the spectrum and implemented a system that smoothed the signal to find the peak. The system was developed in Matlab and C.

University of Michigan-Shanghai Jiao Tong University Joint institute

04/2015 - 02/2017

Teaching Assistant

Shanghai, China

- Worked as the teaching assistant for three programming courses under Prof Weikang Qian.
- <http://umji.sjtu.edu.cn/~wkqian/index.html>

University of Southern California

08/2019 - Present

Teaching Assistant

Los Angeles, US

- Work as the teaching assistant for the course Parallel and Distributed Computation under Prof Viktor K. Prasanna.
- <https://sites.usc.edu/prasanna/teaching/fall2019/ee451/>

PROJECT AND RESEARCH

09/2015-10/2015	MIPS Single-Cycle and Pipelined CPU Design Programmed both Single-Cycle and Pipelined CPU in Verilog and flashed into FPGA which supported most MIPS instructions. (Class Project)
04/2016-06/2016	Class-D audio amplifier simulation Built a Class-D audio amplifier in Cadence and verified over 90% efficiency through simulation. (Undergraduate Research Program)
06/2016-07/2016	Online car renting website Developed an online car renting website in Python and MySQL which could let customers find, borrow and return cars between cities. (Class Project)
09/2016-12/2016	<i>A Neural Network Based Approach for CNC Machines Cutting Tools Image Recognition</i> Built a cabinet that transmitted the cutting tools to CNC while checking the type of the tools through Convolutional Neural Network. (Capstone project sponsored by Siemens)
12/2016-04/2017	Microsoft Image Cup, Perfect;Tune Developed a program in matlab and C that detected the pitch of instrument in real time and gave feedback to musicians according to the original sheet to help them practice.
12/2017-Present	Student Researcher in the FPGA/Parallel Computing Lab Lab lead by Prof Viktor K. Prasanna focus on solving data, compute and memory intensive problems in the intersection of high speed network processing, data-intensive computing, and high performance computing. Worked on a parallelization of machine learning based graph embedding algorithm. http://http://fpga.usc.edu/

PUBLICATIONS

1. Hanqing* Zeng, Hongkuan* Zhou, Ajitesh Srivastava, Rajgopal Kannan, and Viktor Prasanna. Accurate, efficient and scalable graph embedding. In *Proc. 33rd IEEE International Parallel and Distributed Processing Symposium (IPDPS 2019)*, 05 2019

HONORS AND SCHOLARSHIPS

05/2013	Second prize, National Olympiad in Informatics in Shanghai
05/2014	Meritorious Winner (Second Prize) , MCM-Mathematical Contest in Modeling 2014
10/2014	Third prize, Contemporary Undergraduate Mathematical Contest in Modeling 2014 (CUMCM 2014)
06/2015	Progress Award, SJTU-JI
04/2016, 09/2016	Dean's List

* Equal contribution

TECHNICAL STRENGTHS

Computer Languages	C/C++, Python, Matlab, Verilog, MySQL
Tools	Git, L ^A T _E X, Bash
Language	Chinese, English, Japanese (N2 Level), German (B1 level)