

WEN-TAO ZHANG (TOBY)

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EDUCATION

Peking University

Sep. 2013 - July. 2017

B.S. in Computer Science and Technology

– Overall GPA: 3.54/4.0 Major GPA: 3.62/4.0

National Engineering Laboratory for Video Technology (NELVT), Video Coding Technology Lab

Advisor: Siwei Ma

University of Southern California

June. 2017 - Present

Master student in Computer Science

EXPERIENCE

Students' Association of College of EECS, Peking Univ.

Sept. 2013 - June 2014

Member of Academic Dept.

Organized several lectures about overseas studying and postgraduate recommendation

Video Coding Technology Lab, Peking Univ.

Apr. 2015 - June. 2016

Intern

Did research on High Efficiency Video Coding

Zhang Research Group, Computer Systems Lab, Cornell Univ.

July 2016 - Sept. 2016

Student Research Assistant

Did research project about Binarized Neural Network (BNN) Acceleration

AWARDS, GRANTS & HONORS

International Olympiad in Informatics (IOI) 2013 China Team Selection Competition Ninth Place

The ACM-ICPC Asia Regional Contest Chengdu Site 2013 Silver Medal (Twenty-third Place)

Merit Student of Peking University, 2013 - 2014 Academic Year

Tung OACL Scholarship, 2013 - 2014 Academic Year

The ACM-ICPC Asia Regional Contest Mudanjiang Site 2014 Gold Medal (Tenth Place)

PROJECTS

Image Segmentation

Jun. 2015

A naive implementation based on Graph-Cut algorithm

<https://github.com/nsknj/graph-cut-based-on-maxflow>

Log File System

Jan. 2016

Designed a client caching mechanism for Hadoop Distributed File System (HDFS)

<https://github.com/nsknj/LogFileSystem>

Pedestrian and Car Detection on Dataset PKUSVD

Nov. 2015 - Dec. 2015

Neural network based on Fast-RCNN, Proposal algorithm: ACF & EdgeBox

<https://github.com/nsknj/fast-rcnn-final>

Birdway*Oct. 2015 - Dec. 2015*

A collaborative editing plugin for Atom

<https://github.com/yangzhixuan/birdway> <https://github.com/nsknobjj/Birdway-Server>

Video coding based on object features*June 2015 - May 2016*

Built an application that can search for a similar frame in a video using extracted features

Big File Upload plugin on Jupyter Notebook*April 2016 - June 2016*

Add a plugin to upload big file on Jupyter Notebook

<https://github.com/nsknobjj/notebook/tree/upload>

Binarized Neural Network (BNN) acceleration project*July 2016 - Sept. 2016*

Test the baseline of BNN, and implemented BNN with Halide, a language for parallelization and optimization

<https://github.com/nsknobjj/bnn-halide>

PUBLICATIONS

Zhao, Ritchie, Weinan Song, Wentao Zhang, Tianwei Xing, Jeng-Hau Lin, Mani B. Srivastava, Rajesh Gupta, and Zhiru Zhang. "Accelerating Binarized Convolutional Neural Networks with Software-Programmable FPGAs." In FPGA, pp. 15-24. 2017.