Cheng Zhang

The Ohio State University Phone: 614-264-0299 (US), +86-18301559031 (CN)

Dept. of Computer Science & Engineering Email: zhang.7804@osu.edu

2015 Neil Avenue Homepage: https://czhang0528.github.io/Columbus, OH 43210 GitHub: https://github.com/czhang0528/

Education

The Ohio State University (OSU), OH, U.S.

01/2017 - present

Ph.D. in Computer Science and Engineering Advisor: Wei-Lun (Harry) Chao and Dong Xuan

Beijing University of Posts and Telecommunications (BUPT), Beijing, China

2013 - 2016

M.S. in Computer Science and Engineering

Thesis: Research on Key Techniques of Gait Recognition based on Deep Learning (Best Thesis) [thesis][slides]

Advisor: Huadong Ma

Tianjin University (TJU), Tianjin, China

2009 - 2013

B.S. in Computer Software

Thesis: Minimum Topological Discrepancy Grid of Superpixels for Fast Object Localization (Best Thesis) [thesis][slides]

Advisor: Wei Feng

Research Interests

Machine Learning, Computer Vision, and Mobile Sensing

Experience

Ohio State University, OH, USA

09/2018 - present

Research assistant, Advisor: Wei-Lun (Harry) Chao

I am working on transfer learning (few-shot learning), graph networks and computer vision.

DeepCode Robotics, Shanghai, China

05/2017 - 08/2017, 05/2018 - 08/2018

Intern, Advisor: Dong Xuan

I worked on developing novel algorithms and systems for real-time sports analysis and robot planning. [INFOCOM'18]

Beijing University of Posts and Telecommunications, Beijing, China

09/2013 - 04/2016

Graduate Research Assistant, Advisor: Huadong Ma

I worked on applying computer vision algorithms to solve real-word applications such as human identification [ICASSP'16] [Neuroinformatics'18], vision-based air quality monitoring [IMWUT'18], and inter-camera object tracking [HHME'15].

Alibaba, Beijing, China

07/2015 - 09/2015

Intern in Multimedia Team (currently DAMO Academy), Mentor: Xian-Sheng Hua and Pan Pan

I worked on large-scale image categorization for Pailitao product - the visual search service on Mobile Taobao. [slides]

Huawei, Beijing, China

08/2014 - 04/2015

Intern in 2012 Laboratories, Mentor: Ke Xia

I worked on using machine learning methods to automatically detect high risk BOM products for Huawei HUMMER early warning system. (Joint project between BUPT and Huawei)

Tianjin University, Tianjin, China

09/2011 - 06/2013

Undergraduate student in Media Computing Group, Advisor: Wei Feng I worked on superpixel gridization for fast object localization. [slides]

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Publications

Conference Proceedings

 MV-Sports: A Motion and Vision Sensor Integration-Based Sports Analysis System Cheng Zhang, Fan Yang, Gang Li, Qiang Zhai, Yi Jiang, Dong Xuan IEEE International Conference on Computer Communications (INFOCOM), Honolulu, HI, USA, Apr 2018

2. Third-Eye: A Mobilephone-Enabled Crowdsensing System for Air Quality Monitoring
Liang Liu, Wu Liu, Yu Zheng, Huadong Ma, Cheng Zhang
ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp), Singapore, Oct 2018

3. Siamese Neural Network based Gait Recognition for Human Identification
Cheng Zhang, Wu Liu, Huadong Ma, Huiyuan Fu
IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Shanghai, China, Mar 2016

Journal Articles

1. Third-Eye: A Mobilephone-Enabled Crowdsensing System for Air Quality Monitoring
Liang Liu, Wu Liu, Yu Zheng, Huadong Ma, Cheng Zhang
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Mar 2018

2. Learning Efficient Spatial-Temporal Gait Features with Deep Learning for Human Identification Wu Liu, Cheng Zhang, Huadong Ma, Shuangqun Li
Neuroinformatics, Feb 2018

3. Scene-free Multi-class Weather Classification on Single Images Zheng Zhang, Huadong Ma, Huiyuan Fu, Cheng Zhang Neurocomputing, May 2016

Patents

1. **Method and Device for Gait Recognition** Huadong Ma, Wu Liu, Huiyuan Fu, **Cheng Zhang** US Patent, 9633268

Honors and Awards

Ph.D. in Ohio State

Ranked No.3 in Look into Person Challenge: Multi-Human Pose Estimation (with CVPR 2018)
IEEE INFOCOM Student Travel Grant Award, 2018

Ranked No.3 in Look into Person Challenge: Single Person Human Pose Estimation: (with CVPR 2017)

M.S. in BUPT

Best Master's Thesis, BUPT, 2016 IEEE ICASSP Student Travel Grant Award, 2016 Excellent Graduate, Beijing City, 2016 National Scholarship, Ministry of Education, China, 2015 VMware Excellent Scholarship, 2014

B.S. in Tianjin University

Best Undergraduate Thesis, 2013 Excellent Graduate, TJU, 2013 Hitachi Scholarship, 2012 Golden Award, the 8th Challenge Cup Innovation Competition, China, 2012 Weichai Power Scholarship (twice), 2010 and 2011 Cheng Zhang 3

Professional Activities

Reviewer for Journals

ACM Transactions on Sensor Networks (ToSN)
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT)
Machine Vision and Applications (MVA), Springer

Reviewer for Conferences

IEEE ICME19, IEEE INFOCOM19, IEEE ICIP17-18, IEEE GlobalSIP17-18

Teaching

The Ohio State University

GTA, CSE 4471: Information Security, Fall 2018, Instructor: Dong Xuan

GTA, CSE 5432: Mobile Handset Systems and Networking, Fall 2018, Instructor: Dong Xuan

Beijing University of Posts and Telecommunications

GTA, Computer Graphics, Fall 2015, Instructor: Haitao Zhang

Skills

Language

C/C++, Python, Matlab, Scala, Shell, CUDA

Tool

Pytorch, Caffe, Tensorflow, Darknet

Last updated: November 20, 2018