# **BO ZHAO**

Ph.D. Candidate, Computer Science Southwest Jiaotong University, P.R.China

Email: zhaobo.cs@gmail.com Homepage: www.zhaobo.me

#### **EDUCATION**

| National University of Singapore, Singapore               | $Sep. \ 2015-Present$ |
|---|-----------------------|
| Visiting Scholar  |                       |
| Southwest Jiaotong University, China                      | $Sep. \ 2012-Present$ |
| Ph.D. Candidate in Computer Science, Overall GPA: 3.36/4  |                       |
| Southwest Jiaotong University, China                      | Sep. 2010-Jun. 2012   |
| M.S. in Computer Science*, Overall GPA: 3.51/4            |                       |
| Southwest Jiaotong University, China                      | Sep.2006-Jun.2010     |
| B.S. in Computer Science, Overall GPA: 3.67/4             |                       |
| I-Shou University, Taiwan                                 | Sep.2009-Jan.2010     |
| Exchange Student in Computer Science, Overall GPA: 3.65/4 | 1                     |

## RESEARCH INTERESTS

Deep Learning, Computer Vision, Image Segmentation Multimedia Information Retrieval, Data Mining

## KEY COMPETENCIES

- Four years' research experience on Multimedia, Computer Vision, Deep Learning, Pattern Recognition.
- Specific research interests involve fine-grained image classification, image segmentation, information retrieval with deep learning techniques including CNN and RNN.
- Good knowledge about deep learning models such as Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN) and Long-Short Term Memory (LSTM). Good understanding of traditional machine learning techniques such as supervised learning models (e.g. SVM, KNN).
- Extensive experience in Deep Learning open-source platforms including Caffe, Theano, Torch.

## **PUBLICATIONS**

- 1. **Bo Zhao**, Xiao Wu, Zhi-Qi Cheng, Hao Liu, Jiashi Feng, "Multi-View Image Generation from a Single-View,", submitted to International Conference on Computer Vision (ICCV), 2017.
- 2. **Bo Zhao**, Jiashi Feng, Xiao Wu, Shuicheng Yan, "Memory-Augmented Attribute Manipulation Networks for Fashion Search,", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.
- 3. **Bo Zhao**, Jiashi Feng, Xiao Wu, Shuicheng Yan, "A Survey on Deep Learning-Based Fine-Grained Object Classification and Semantic Segmentation," International Journal of Automation and Computing, 2017. (EI Journal)
- 4. **Bo Zhao**, Xiao Wu, Jiashi Feng, Qiang Peng, Shuicheng Yan "Diversified Visual Attention Networks for Fine-Grained Object Classification," IEEE Transaction on Multimedia, 2017. (SCI)
- 5. **Bo Zhao**, Xiao Wu, Qiang Peng, Shuicheng Yan "Clothing Cosegmentation for Shopping Images," IEEE Transaction on Multimedia, 2016 (SCI)
- 6. **Bo Zhao**, Yan Zhu, "Formalizing and Validating the Web Quality Model for Web Source Quality Evaluation," Expert Systems with Applications, 41(7):3306-3312, 2014. (SCI)

<sup>\*</sup>Transfered to combined Master/Ph.D program in Sep. 2012

- 7. Xiao Wu, **Bo Zhao**, Ling-Ling Liang, Qiang Peng, "Clothing Extraction by Coarse Region Localization and Fine Foreground/Background Estimation," International Conference on Multimedia Modeling (MMM), Huangshan, China, January 2013. (EI Conference)
- 8. Yan Zhu, **Bo Zhao**, "Formalization and Goodness-of-fit Analysis of Web Quality Model," Journal of Southwest Jiaotong University, 47(2):306-312, 2012. (EI Journal)
- 9. Zhao-Rui Liu, Xiao Wu, **Bo Zhao**, "Clothing Extraction Using Region-based Segmentation and Pixel-level Refinement," IEEE International Symposium on Multimedia (ISM), Tai-chung, Taiwan, December 2014. (EI Conference)

## **PATENTS**

- 1. Xiao Wu, **Bo Zhao**, Qiang Peng, "A Cosegmentation Method for Clothing Shopping Images."
- 2. Xiao Wu, **Bo Zhao**, Ling-ling Liang, Qiang Peng, "Method for Detecting and Extracting Main Target in Cluttered Image."
- 3. Xiao Wu, **Bo Zhao**, Ling-ling Liang, Qiang Peng, "Target Clothing Extraction Method Aiming at Shopping Image Retrieval."

# RESEARCH PROJECTS

| Sichuan Provincial Science and Technology Innovation Seeding Fund   | PI                                   |
|---|--------------------------------------|
| Clothing Visual Search Based on Image Understanding   | Oct. 2014 – Dec. 2015                |
| Sichuan Provincial Science and Technology Innovation Seeding Fund Cosegmentation for Clothing Images                | <b>PI</b><br>Oct. 2012 – Dec. 2013   |
| National Natural Science Foundation of China  | Participant                          |
| Cluttered Clothing Image Retrieval and Recommendation   | Jan. 2014 – Dec. 2017                |
| Sichuan Provincial Science Fund for Distinguished Young Scholars  | Participant                          |
| Target Extraction of Cluttered Shopping Images  | Jan. 2013 – Dec. 2015                |
| Sichuan Provincial Science Fund for Distinguished Young Scholars  | Participant                          |
| Content-Based Shopping Image Retrieval  | Jan. 2012 – Dec. 2013                |
| National Key Laboratory Project  Massive High-speed Train Data Management System                                    | Participant<br>Oct. 2010 – Jan. 2012 |
| National College Student Innovation and Practice Project Applications of NS2 in the Teaching of Network Engineering | <b>Co-PI</b> Sep. 2008 – Jun. 2009   |

## HONORS AND AWARDS

| Scholarship from China Scholarship Council | May 2015  |
|--|-----------|
| National Scholarship for Graduate Students | Oct. 2014 |
| SWJTU Excellent Undergraduate              | Jun. 2010 |
| National Scholarship                       | Nov. 2008 |
| National Scholarship                       | Nov. 2007 |

# REFEREES

## Xiao Wu

Professor at Department of Computer Science, SWJTU

Email: wuxiaohk@gmail.com

## Jiashi Feng

Assistant Professor at Department of Electronic and Computer Engineering, NUS

Email: elefjia@nus.edu.sg