# 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	

## 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**, Jiashi Feng, Xiao Wu, Shuicheng Yan "Memory-Augmented Attribute Manipulation Networks for Fashion Search," Submitted to IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.
- 2. **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)
- 3. **Bo Zhao**, Xiao Wu, Jiashi Feng, Qiang Peng, Shuicheng Yan "Diversified Visual Attention Networks for Fine-Grained Object Classification," IEEE Transaction on Multimedia (SCI)
- 4. **Bo Zhao**, Xiao Wu, Qiang Peng, Shuicheng Yan "Clothing Cosegmentation for Shopping Images," IEEE Transaction on Multimedia, 2016 (SCI)
- 5. **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)
- 6. 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)

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

- 7. 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)
- 8. 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> 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 Oct. 2010 – Jan. 2012
National College Student Innovation and Practice Project Applications of NS2 in the Teaching of Network Engineering	Co-PI 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
1	

# 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