Wenbin Li

Max Planck Institute for Informatics Campus E1 4, 66123 Saarbrücken wenbinli@mpi-inf.mpg.de

RESEARCH INTEREST Computer Vision: material recognition, object recognition, activity recognition

Robotics: perception and manipulation

Machine Learning: deep learning, transfer learning and reinforcement learning

EDUCATION

PhD student, Computer Vision & Robotics

2013-present

Saarland University & Max Planck Institute for Informatics, Germany

Master of Science, Computer Science

2010-2013

2006-2010

Saarland University, Germany

Thesis title: Multi-scale Feature Learning for Material Recognition

Bachelor of Science, Science and Technology of Intelligence Beijing University of Posts and Telecommunications, China Specialization: Statistical Natural Language Processing

COMPUTER SKILLS

Python, Matlab, R, Perl, Bash, C/C++,

 ${\it Java\&Android,\,Objective\,\,C\&iOS},$

OpenCV, PCL, ROS, Theano, Caffe

LANGUAGES

Chinese (native), English (fluent), German (basic), Japanese (basic)

PROFESSIONAL Data Mining Engineer,

Jun, 2010- July, 2010

EXPERIENCE Funshion, Beijing, China

ACADEMIC

Teaching Assistant

Oct, 2014- Feb, 2015

EXPERIENCE

Machine Learning, Saarland University, Germany

Research Assistant Mar, 2012- Feb, 2013

Computer Vision and Multimodal Computing Department, Max Planck Institute for

Informatics, Germany

Research Topic: Unsupervised feature learning for material recognition

Research Assistant Nov, 2011- Mar, 2012

Computer Graphics Department, Max Planck Institute for Informatics, Germany

Research Topic: Text entry

Research Assistant

Mar, 2011- Nov, 2011

Computer Vision and Multimodal Computing Department, Max Planck Institute for

Informatics, Germany

Research Topic: Material recognition

PUBLICATION

[1] Wenbin Li, Aleš Leonardis and Mario Fritz. Visual Stability Prediction for Robotic Manipulation.

IEEE International Conference on Robotics and Automation (ICRA), 2017.

- [2] Wenbin Li, Aleš Leonardis and Mario Fritz. Visual Stability Prediction and Its Application to Manipulation. Advances in Neural Information Processing Systems (NIPS) Workshop on Intuitive Physics. 2016. (Extended Abstract); AAAI Spring Symposium Series: Interactive Multi-Sensory Object Perception for Embodied Agents, 2017. (Extended Abstract) Technical Report, 2016. (arXiv:1609.04861, full Version)
- [3] Wenbin Li, Seyedmajid Azimi, Aleš Leonardis and Mario Fritz. To Fall Or Not To Fall: A Visual Approach to Physical Stability Prediction. Technical Report, 2016. (arXiv:1604.00066. 2016)
- [4] Wenbin Li and Mario Fritz. Recognition of Ongoing Complex Activities by Sequence Prediction over a Hierarchical Label Space. In IEEE Winter Conference on Applications of Computer Vision (WACV) 2016.
- [5] Wenbin Li and Mario Fritz. Teaching Robots the Use of Human Tools from Demonstration with Non-Dexterous End-Effectors. In IEEE RAS International Conference on Humanoid Robots (HUMANOIDS) 2015.
- [6] Wenbin Li. Learning Multi-scale Representations for Material Classification. Pattern Recognition. Springer International Publishing, 2014. 757-764.
- [7] Antti Oulasvirta, Anna Reichel, Wenbin Li, Yan Zhang, Myroslav Bachynskyi, Keith Vertanen, and Per Ola Kristensson. Improving two-thumb text entry on touchscreen devices.
 In SIGCHI Conference on Human Factors in Computing Systems (CHI) 2013.
- [8] Wenbin Li and Mario Fritz. Recognizing materials from virtual examples In European Conference on Computer Vision (ECCV) 2012.

AWARDS

Scholarship, International Max Planck Research School for Computer Science 2013-2015

Scholarship, Saarbrücken Graduate School of Computer Science, Saarland University 2010-2012

Scholarship for excellence in academic performance, Beijing University of Posts and Telecommunications 2007-2009

First prize and most creative award for customized Firefox web browser designing competition (among 11 teams from top universities in China)

2008