# Lichen Wang

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Education

07/2016 – Present Northeastern University (NEU), Boston, USA

Ph. D Candidate, Major: Computer Engineering, GPA:4.0

Supervisor: Yun Raymond Fu

09/2013 – 07/2016 Xi'an Jiaotong University (XJTU), Xi'an, China

Master of Engineering Major: Electronic and Information Engineering, GPA: 3.3

Supervisor: Aimin Zhang

Thesis: Vision Based PCB Defects Detection System Implementation

09/2009 – 09/2013 Harbin Institute of Technology (HIT), Harbin, China

Bachelor of Control Engineering Major: Control Engineering, GPA: 3.7

Supervisor: Zhenshen Qu

Thesis: Foreign Matter Detection of Infusion Bottle based on Computer Vision

#### Field of Interests

Computer Vision, Deep Learning, Machine Learning, Transfer Learning, Representation learning.

#### **Skills**

Operation System: Windows, Linus (Ubuntu), OSX.

Language: C/C++, Python, Matlab.

Software: Tensorflow, OpenCV, Matlab, Anaconda, PCL, etc.

## Research Experience

09/2016–Present SMILE Lab, Northeastern University, Boston, USA

**Position:** Research Assistant **Supervisor:** Yun Raymond Fu

• Multi-label image annotation/retrieval.

• Transfer Subspace Clustering for Human Motion Segmentation.

• Multi-Modality Human Motion Recognition and Dataset.

09/2013-07/2016 Control and Detection Lab, Xi'an Jiaotong University, Xi'an, China

Position: Research Assistant Supervisor: Aimin Zhang

• Vision based PCB defects detection system.

• Vision based navigation system for Automatic Drone Delivery System.

• Multi-target tracking and recognition based on Optical Camera Communication.

• Vision based optical fiber size measurement system.

07/2011-09/2013 Computer Vision Lab, Harbin Institute of Technology, Harbin, China

**Position:** Research Assistant **Supervisor:** Zhenshen Qu

• Software for a compatible and compact machine vision platform.

• Foreign matter detection in infusion bottle, a high speed vision based bottle liquid volume estimation program and a bottle body defects detection program.

• Developed a rendezvous and docking semi-physical simulation system in charge of cooperative target tracking and localization.

### Working Experience

06/2018–09/2018 **Zebra Technology, IL, USA** 

& 06/2017–09/2017 Position: Computer Vision Research Intern Supervisor: Yan Zhang & Kevin O'Connell

• Vision based 3D data processing, detection, localization, and recognition

• Person and object detection based on computer vision (Dataset building, algorithm testing, and system deployment)

07/2013–09/2013 Nanjing Intelligent Apparatus Co., Ltd., Nanjing, China

**Position:** Research Intern Supervisor: Aimin Zhang & Hang Zhang

• Developed a signal generator simulation system.

## Publication

09/2018	Lichen Wang, Zhengming Ding, Yun Fu, "Low-Rank Transfer Human Motion Segmentation,"
	IEEE Transactions on Image Processing (TIP)
06/2018	Yulun Zhang, Kunpeng Li, Kai Li, Lichen Wang, Bineng Zhong, Yun Fu, "Image Super Resolution
	Using Very Deep Residual Channel Attention Networks," 2018 European Conference on Computer
	Vision (ECCV), Munich, Germany
07/2018	Lichen Wang, Zhengming Ding, Yun Fu, "Adaptive Graph Guided Embedding for Multi-label
	Annotation," 2018 International Joint Conference on Artificial Intelligence (IJCAI), Stockholm,
	Sweden
02/2018	Lichen Wang, Zhengming Ding, Yun Fu, "Learning Transferable Subspace for Human Motion
	Segmentation," 2018 National Conference on Artificial Intelligence (AAAI), New Orleans, USA
07/2015	Lichen Wang, Aimin Zhang, Chujia Guo, Pervez Bhan, Tian Yan, "Modified Multi-target
	Recognition Based on CamCom," 2015 Chinese Control Conference (CCC), Hangzhong, China
05/2015	Lichen Wang, Aimin Zhang, Chujia Guo, Songyun Zhao, Pervez Bhan, "3-D Reconstruction for
	SMT Solder Joint Based on Joint Shadow," 2015 Chinese Control and Decision Conference
	(CCDC), Qingdao, China
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06/2016 **Lichen Wang**, Min Wu, Qinglin Liu, "Vision Based Evaporator Frosting Detection System," Authorized China's Invention Patent # 201511025257.3

07/2015 Zhenshen Qu, **Lichen Wang**, Wenhua Jiao, et al. "Novel Methods and System of Foreign Matter Detection in Infusion Bottle," Authorized China's Invention Patent #2013102084539

## Presentation

2018	IJCAI Conference, Stockholm, Sweden
2018	AAAI Conference, New Orleans, USA
2015	CCC Conference, Hangzhong, China
2013	CCDC Conference, Qingdao, China

# Honors and Awards

2018	AAAI Student Travel Award
2015	Third prize of Microsoft Imagine Cup Competition in Shaanxi Province (1%).
2015	Excellent Postgraduate in Xi'an Jiaotong University (20%).
2013	Meritorious Winner of International Mathematical Contest in Modeling (MCM/ICM) (15%).
2011	National Scholarship (the undergraduate students highest honor in China, 3%).
2011	First Prize of National Undergraduate Mathematical Contest in Heilongiang Province (5%)