Lichen Wang

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Education

09/2016–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

Machine Learning, Computer Vision, Data Mining, Transfer Learning

Skills

Operation System: Windows, Linux (Ubuntu), MacOS
Language: Python, C/C++, Matlab.
Software: TensorFlow, Pytorch, Matlab, OpenCV, PCL, Multisim, AutoCAD, etc.

Research Experience

09/2016–Present **SMILE Lab, Northeastern University, Boston, USA**
- Computer vision for transfer learning, domain adaptation, semi-supervised learning.
- Machine learning for multi-view learning, multi-label learning, human action recognition
- Graph representation learning

06/2019–06/2019 **NEC Laboratories America, Princeton, USA**
- A general graph representation learning framework for wide range of down-stream machine learning tasks

06/2018–08/2018 **Zebra Technologies Corporation, Lincolnshire, USA**
06/2017–08/2017
- 3D data (point clouds) processing, object localization, and shape analysis
- Vision-based object/human detection and human pose estimation

09/2013–07/2016 **Control and Detection Lab, Xi'an Jiaotong University, Xi'an, China**
- Vision based PCB defects detection system.
- Vision based navigation system for the Drone Delivery System.
- Target tracking and recognition based on Optical Camera Communication.
- Vision based optical fiber size measurement for a manufactory quality control system.

07/2013–09/2013 **Nanjing Intelligent Apparatus Co., Ltd.,Nanjing, China**
- Signal generator for power grid flaw simulation. different.

07/2012–09/2013 **Computer Vision Lab, Harbin Institute of Technology, Harbin, China**
- Compact machine vision platform. Transformed to a formal company called Yitong Technology Co., Ltd. in 2014.
- A foreign matter detection program in infusion bottle, a high speed vision based bottle liquid volume estimation program and a bottle body defects detection program.
- Participated in a development of rendezvous and docking semi-physical simulation system in charge of cooperative target tracking and localization.

Publication

02/2020 **Lichen Wang**, Yunyu Liu, Can Qin, Gan Sun, Yun Fu, "Dual Relation Semi-supervised Multi-label Learning," 2020 The National Conference on Artificial Intelligence (AAAI), New York, USA

12/2019 Can Qin, Haoxuan You, **Lichen Wang**, C.-C. Kuo, Yun Fu, "PointDAN: A Multi-Scale 3D Domain Adaption Network for Point Cloud Representation," 2019 Neural Information Processing Systems (NeurIPS) (Oral presentation), Vancouver, Canada

11/2019 **Lichen Wang**, Zhengming Ding, Seungju Han, Jae-Joon Han, Changkyu Choi, Yun Fu, "Generative Correlation Discovery Network for Multi-Label Learning," 2019 IEEE International Conference on Data Mining (ICDM) (Regular paper), Beijing, China

11/2019 Denghui Zhang, Junming Liu, Hengshu Zhu, Yanchi Liu, **Lichen Wang**, Pengyang Wang, Hui Xiong, "Job2Vec: Job Title Benchmarking with Collective Multi-View Representation Learning," 2019 ACM International Conference on Information and Knowledge Management (CIKM) (Regular paper), Beijing, China

11/2019 **Lichen Wang**, Zhengming Ding, Zhiqiang Tao, Yunyu Liu, Yun Fu, "Generative Multi-View Human Action Recognition," 2019 International Conference on Computer Vision (ICCV) (Oral presentation), Seoul, Korea

11/2019 Can Qin, **Lichen Wang**, Yunlun Zhang, Yun Fu, "Generatively Inferential Co-Training for Unsupervised Domain Adaptation," 2019 International Conference on Computer Vision (ICCV) Workshop (Best paper award), Seoul, Korea

11/2019 Gan Sun, Yang Cong, **Lichen Wang**, Zhengming Ding, Yun Fu, "Online Multi-task Clustering for Human Motion Segmentation," 2019 International Conference on Computer Vision (ICCV) Workshop, Seoul, Korea

09/2018 **Lichen Wang**, Zhengming Ding, Yun Fu, "Low-Rank Transfer Human Motion Segmentation," IEEE Transactions on Image Processing (TIP)

09/2018 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

01/2018 **Lichen Wang**, Zhengming Ding, Yun Fu, "Learning Transferable Subspace for Human Motion Segmentation," 2018 The 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

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

06/2015 **Lichen Wang**, Min Wu, Qinglin Liu, "Vision Based Evaporator Frosting Detection System," Authorized China's Invention Patent # 201511025257.3

Honors and Awards

2015 Third prize of Microsoft Imagine Cup Competition in Shaanxi (1%)
As a team leader and be in charge of developing a vision based navigation system and part of modeling and simulating a quanrotor control system.

2015 Excellent Postgraduate in Xi'an Jiaotong University (20%)

2013 Meritorious Winner of International Mathematical Contest in Modeling (MCM/ICM) (15%)
Including established reasonable mathematical models, programmed and solved the problems with computer and analyzed the effection of the models.

2011 National Scholarship (the undergraduate students highest honor in China, 3%)

2011 First Prize of National Undergraduate Mathematical Contest in Heilongjiang Province (5%)