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 multi-view learning, human action recognition
- Machine learning for multi-label learning, transfer learning, domain adaptation
- Graph representation learning
- Natural Language Processing and Reinforcement Learning

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

07/2012–09/2013 **Computer Vision Lab, Harbin Institute of Technology, Harbin, China**
- High speed Vision-based infusion bottle foreign matter detection program.
- Implemented a compact machine vision and image processing platform.

Publication

05/2020 **Lichen Wang**, Bin Sun, Joseph Robinson, Taotao Jing, and Yun Fu, "EV-Action: Electromyography-Vision Multi-Modal Action Dataset," 2020 IEEE International Conference on Automatic Face and Gesture Recognition (FG), Buenos Aires, Argentina

04/2020 **Lichen Wang**, Bo Zong, Qianqian Ma, Wei Cheng, Jingchao Ni, Weichao Yu, Yanchi Liu, Dongjing Song, Haifeng Chen, Yun Fu, "Inductive and Unsupervised Representation Learning on Graph Structured Objects," 2020 International Conference on Learning Representations (ICLR), Ethiopia

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), 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), 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.

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%)