

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
- 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 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.
 - High speed Vision-based infusion bottle foreign matter detection program.
 - Participated in a development of rendezvous and docking semi-physical simulation system in charge of cooperative target tracking and localization.

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), Hangzhou, 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 quadrotor 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 effect 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%)