Xujiang Zhao

PERSONAL INFORMATION

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LinkedIn: https://linkedin.com/in/zxj32
Github: https://github.com/zxj32
Homepage: **https://zxj32.github.io/**

EXPERIENCE

NEC Laboratories America, Inc. - *Research Intern*

Princeton, New Jersey, USA May 2021 - Sep 2021

Mentor: Dr. Xuchao Zhang

Research Interests: Sequential Uncertainty.

The University of Texas at Dallas - *Research Assistant*

Richardson, Texas, USA Aug 2019 - Present

Advisor: Feng Chen

Research Interests: Data Mining, Machine Learning, Uncertainty in Deep Learning, Abnormal Detection

Alibaba Damo Academy - *Research Intern*

Seattle, Washington, USA June 2019 - Sep 2019

Mentor: Dr. Hongxia Yang

Research Interests: Causal discovery with uncertainty.

University at Albany - SUNY - *Research Assistant*

Albany, New York, USA Jan 2018 - June 2019

Advisor: Prof. Feng Chen

Research Interests: Data Mining, Machine Learning, Uncertainty in Deep Learning, Abnormal Detection

EDUCATION

Ph.D., Computer Science(specialized in Machine Learning)

The University of Texas at Dallas, Richardson, Texas, USA, Aug 2019 - Present

Advisor: Prof. Feng Chen

Ph.D., Computer Science(specialized in Machine Learning)

University at Albany - SUNY, Albany, New York, USA, Jan 2018 - June 2019

Advisor: Prof. Feng Chen

MS, Computer Science(specialized in Computer Vision)

University of Science and Technology of China, Hefei, China, Sep 2014 - Dec 2017

Advisor: Prof. Shouhong Wan

Thesis: Remote Sensing Image Object Detection and Recognition Based on Convolutional Neural Network

B.Eng, Civil Engineering

Chongqing University, Chongqing, China, Sep 2010 - June 2014

Advisor: Dr. Xi Tu

Thesis: Image Processing for Bridge Engineering.

PUBLICATION

[1] **Xujiang Zhao**, Xuchao Zhang, Wei Cheng, Wenchao Yu, Yuncong Chen, Haifeng Chen, Feng Chen. "SEED: Sound Event Early Detection via Evidential Uncertainty". Preprint.

[2] Haoliang Wang, Chen Zhao, **Xujiang Zhao**, Feng Chen. "Layer Adaptive Deep Neural Networks for Out-of-distribution Detection". Preprint.

[3] **Xujiang Zhao**, Krishnateja Killamsetty, Rishabh Iyer, Feng Chen. "*An Efficient and Effective Reweighting Approach for Robust Semi-Supervised Learning with Out of Distribution Data.*" Preprint.

[4] Krishnateja Killamsetty, **Xujiang Zhao**, Feng Chen, Rishabh Iyer. "RETRIEVE: Coreset Selection for Efficient and Robust Semi-Supervised Learning". Advances in neural information processing systems (**NeurIPS 2021**).

[5] Liyan Xu, Xuchao Zhang, **Xujiang Zhao**, Haifeng Chen, Feng Chen, Jinho D. Choi. "Boosting Cross-Lingual Transfer via Self-Learning with Uncertainty Estimation". 2021 Conference on Empirical Methods in Natural Language Processing (**EMNLP 2021**), Short Paper.

[6] Zhuoyi Wang, Chen Zhao, Yuqiao Chen, Hemeng Tao, Yu Lin, **Xujiang Zhao**, Yigong Wang and Latifur Khan. "*CLEAR: Contrastive-Prototype Learning with Drift Estimation for Resource Constrained Stream Mining.*" In Proceeding of TheWebConf 2021 **(WWW 2021)**.

[7] Yibo Hu, Yuzhe Ou, **Xujiang Zhao**, Feng Chen. "*Multidimensional Uncertainty-Aware Evidential Neural Networks.*" In Proceeding of the Thirty-fifth AAAI Conference on Artificial Intelligence **(AAAI 2021)**.

[8] **Xujiang Zhao**, Feng Chen, Shu Hu, Jin-Hee Cho. "*Uncertainty Aware Semi-Supervised Learning on Graph Data.*" Advances in neural information processing systems

(**NeurIPS 2020, Spotlight; Acceptance rate: 4%**).

[9] Weishi Shi, **Xujiang Zhao**, Qi Yu, Feng Chen. "*Multifaceted Uncertainty Estimation for Label-Efficient Deep Learning.*" Advances in neural information processing systems

(**NeurIPS 2020**).

[10] Adil Alim, **Xujiang Zhao**, Jin-Hee Cho, Feng Chen. "*Uncertainty-Aware Opinion Inference Under Adversarial Attacks.*" In 2019 IEEE International Conference on Big Data (**Big Data 2019**), pp. 6-15. IEEE, 2019.

[11] **Xujiang Zhao**, Yuzhe. Ou, Lance. Kaplan, Feng. Chen, and Jin-Hee. Cho. "*Quantifying Classification Uncertainty using Regularized Evidential Neural Networks*." accepted to **AAAI 2019 Fall Symposium Series**, Artificial Intelligence in Government and Public Sector.

[12] **Xujiang Zhao**, Shu Hu, Jin-Hee Cho, and Feng Chen. "*Uncertainty-based Decision Making using Deep Reinforcement Learning*." In 2019 22th International Conference on Information Fusion (**FUSION 2019**), pp. 1-8. IEEE, 2019.

[13] **Xujiang Zhao**, Feng Chen, and Jin-Hee Cho. "*Deep Learning for Predicting Dynamic Uncertain Opinions in Network Data.*" In 2018 IEEE International Conference on Big Data (**Big Data 2018**), pp. 1150-1155. IEEE, 2018.

[14] **Zhao, Xujiang,** Feng Chen, and Jin-Hee Cho. "*Deep Learning based Scalable Inference of Uncertain Opinions*." In 2018 IEEE International Conference on Data Mining (**ICDM 2018**), pp. 807-816. IEEE, 2018. **(Full paper; Acceptance rate: 8.86%)**

[15] **Xujiang Zhao**, Feng Chen, and Jin-Hee Cho. "Uncertainty-Based Opinion Inference on Network Data Using Graph Convolutional Neural Networks." In MILCOM 2018-2018 IEEE Military Communications Conference (**MILCOM 2018**), pp. 731-736. IEEE, 2018.

INVITED TALK

"Deep Learning-based Scalable Inference of Uncertain Opinions" at Institute of Information Engineering, Chinese Academy of Sciences (CAS), Beijing, China, Nov. 23. 2018

SERVICES

Program Committee Member:

KDD 2020, KDD 2021, NeurIPS 2021, ICLR 2022, WSDM 2022, AAAI 2022, SDM 2022

AWARDS

ICDM 2018 Student Travel Award, *US National Science Foundation, 2018*

Graduate Student First-class Academic Scholarship, *University of Science and Technology of China, 2017*

Graduate Student First-class Academic Scholarship, *University of Science and Technology of China, 2016*

Graduate Student First-class Academic Scholarship, *University of Science and Technology of China, 2015*

Outstanding Graduate Award of CQU, *Chongqing University, 2014*

First-class College Scholarship, *Chongqing University, 2014*

National Scholarship ((highest national scholarship), *Ministry of Education of the People's Republic of China, 2013*

First Prize in The National Drawing Skills and Advanced Technology, *China Graphics Society, 2012*

National Encouragement Scholarship, *Ministry of Education of the People's Republic of China, 2012*

National Encouragement Scholarship, *Ministry of Education of the People's Republic of China, 2011*

SKILLS

Python, TensorFlow, PyTorch, Caffe, MATLAB