Xuhong WANG

PhD candidate

- 2 May 1995
- Shanghai, China
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Interests

Anomaly Detection
Variational Inference
Graph Neural Networks
Graph Embedding
Data Dining
Self-supervised Learning
Encoder-Decoder Networks
Generative Adversarial Networks

Skills

Languages: Python, Matlab, C/C++, SQL, Latex, etc.

Development: Linux, Git, Shell, etc.

Frameworks: PyTorch, Deep Graph Library, PyTorch Geometric, Networkx, Tensorflow, Intel Analytics Zoo, Scikit-Learn, etc.

Strengths

Good understanding for AI papers
Rich experience in model coding
Innovator
Fast Learner
self-motivated

Hobbies

Basketball
Guitar
Flute
Hiking
Cooking

Education

since 2017	Shanghai Jiao Tong University, Shanghai, China	Ph.D. candidate
	Majoring in Automation GPA 3.82/4	
2021(EXP)	University of California, Berkeley, USA	Visiting Ph.D
	Majoring in EE	
Feb. 2017	Keio University, Tokyo, Japan	Exchange Student
	The international Campus	
2013 - 2017	Sichuan University, Sichuan, China	Bachelor
	Majoring in Electronic Engineering (EE) average mark 84.5	

Experience

Jul. 2019 - Deep learning software Intern   Intel Asia-Pacific Co., Shanghai, China
Working on optimizing deep learning framework with PyTorch and *Intel Analytics Zoo*. I currently have two projects:
a. I used my adVAE model in unsupervised biopsy image recognition, which even exceeds the performance of supervised Resnet-50.
b. I applied Graph Neural Network (GNN) for discovering the rules of chemical reactivity. Since the number of classes are huge, label smoothing and AM-Softmax techniques is used beyond the plain GNN.

2018.7 - 11 Project Engineer   China Southern Power Grid Co., Guangdong, China
Working on generalizing anomaly detection technology to the power grid. I built a real time online fault detection system using RPCA algorithm, SQL database and Flask web development framework.

Publications

- *X. Wang** et al. "adVAE: A self-adversarial variational autoencoder with Gaussian anomaly prior knowledge for anomaly detection." Knowledge-Based Systems 190 (2020): 105187. (IF=5.3, H-index=94)

- *X. Wang** et al. "OCGNN: One-class Classification with Graph Neural Networks." arXiv preprint arXiv:2002.09594 (2020).

- *X. Wang** et al. "Partial Discharge Pattern Recognition with Data Augmentation based on Generative Adversarial Networks." Condition Monitoring and Diagnosis. IEEE, 2018.

- J. Huang, *X. Wang**, S. Lin, H. Zhao, Z. Hu. "A Pull-type Braille Screen and its Components Reuse Method." (Patent, No. CN106781881A, July 2017)

- S. Lin, F. Xu, *X. Wang**, W. Yang, L. Yu. "Efficient Spatial-Temporal Normalization of SAE Representation for Event Camera.", IEEE Robotics and Automation Letters. (Under Revision)

- Y. Du, Y. Liu, *X. Wang**, J. Fang, G. Sheng, X. Jiang. "Predicting Weather-Related Failures in Distribution Systems Using Bayesian Neural Network.", IEEE Transactions on Smart Grid. (Under Revision)

Honers and Awards

Sept. 2019	PhD Academic Scholarship of Shanghai Jiao Tong Univ. (TOP 5%)
Oct. 2016	1st Prize, Outstanding Scholarship of Sichuan Univ. (TOP 5%)
May 2016	2st Prize, Outstanding Scholarship of Sichuan Univ. (TOP 10%)
Oct. 2015	2st Prize, Outstanding Scholarship of Sichuan Univ. (TOP 10%)
Sept. 2016	2st Prize, China "Internet+" College Students Innovation and Entrepreneurship Competition
Oct. 2015	3st Prize, National Undergraduate Electronic Design Competition
May 2019	Excellent Postgraduate Student of Shanghai Jiao Tong Univ.
May 2018	Excellent Postgraduate Student of Shanghai Jiao Tong Univ.
Nov. 2015	Excellent Student Cadre of Sichuan Univ.
July 2015	Outstanding Academic Student Association Leader of Sichuan Univ.