# **CURRICULUM VITA**

Xingquan (Hill) Zhu, IEEE Fellow, AAIA Fellow, PhD, Professor

Dept. of Electrical Engineering and Computer Science

Florida Atlantic University

## **Professional Address**

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Google Scholar: <a href="https://scholar.google.com/citations?user=YhKZXtcAAAAJ&hl=en">https://scholar.google.com/citations?user=YhKZXtcAAAAJ&hl=en</a>

## **Research Interests**

Artificial Intelligence, large scale machine learning, and data mining

Real-time analytics and decision support systems

Biomedical, bioinformatics, and health information systems

# **Employment**

| • August 2018 | Professor, Dept. of Electrical Engineering and Computer Science, Florida Atlantic University, FAU, Boca Raton, FL 33431, USA  |
|---------------|---|
| • August 2012 | Associate Professor, Dept. of Electrical Engineering and Computer Science, Florida Atlantic University, FAU, Boca Raton, FL 33431, USA  |
| • May 2009    | Associate Professor and Professor, Centre for Quantum Computation & Intelligent Systems, Faculty of Engineering & Information Technology, University of Technology, Sydney, Australia |
| • August 2006 | Assistant Professor, Dept. of Computer Science and Engineering, Florida Atlantic University, FAU, Boca Raton, FL 33431, USA   |
| October 2002  | Research Assistant Professor, Dept. of Computer Science, University of Vermont, Burlington, VT 05045, USA   |
| • Feb 2001    | Postdoctoral Research Associate, Dept. of Computer Science, Purdue University, West Lafayette, IN 47907, USA  |

# **Education**

| • | February 2001 | PhD in Computer Science, Fudan University, China                       |
|---|---------------|--|
| • | JanJune 2000  | Intern student, Microsoft Research Asia, Beijing 100080, China         |
| • | January 1998  | M.S. in Communication and Electronic Systems, Xidian University, China |
| • | July 1995     | B.S. in Communication Engineering, Xidian University, China            |

# **Research** Grants

### **Active Research Projects**

- NSF-CSIRO: Towards Interpretable and Responsible Graph Modelling for Dynamic Systems
   Xingquan Zhu (PI), Laurent Cherubin (Co-PI), Yufei Tang (Co-PI), Siddhartha Verma (Co-PI)
   Sponsor: National Science Foundation (NSF)
   Duration: 2023-2026
   Amount: \$600,000
- 2. Collaborative Research: III: Small: Taming Large-Scale Streaming Graphs in an Open World Xingquan Zhu (PI), Laurent Cherubin (Co-PI)

Sponsor: National Science Foundation (NSF)

Duration: 2023-2026 Amount: \$300,000

**3.** III: Medium: Collaborative Research: KMELIN: Knowledge Mining and Embedding Learning for Complex Dynamic Information Networks

Xingquan Zhu (PI), Ankur Agarwal (Co-PI), and Dingding Wang (Co-PI)

Sponsor: National Science Foundation Duration: 2018-2023 Amount: \$599,983

**4.** Collaborative Research: Implementation: Medium: Secure, Resilient Cyber-Physical Energy System Workforce Pathways via Data-Centric, Hardware-in-the-Loop Training Yufei Tang (PI), **Xingquan Zhu** (Co-PI), James H VanZwieten (Co-PI), Zhen Ni (Co-PI)

Sponsor: National Science Foundation (NSF)

Duration: 2023-2027 Amount: \$480,000

5. Making the Master's Degree in Artificial Intelligence Accessible to High-Achieving Low-Income Students; Dimitris Pados (PI), Nancy Romance (Co-PI), Stella Batalama (Co-PI), **Xingquan Zhu** (Co-PI), Javad Hashemi (Co-PI)

Sponsor: National Science Foundation (NSF)

Duration: 2020-2024 Amount: \$1,000,000

6. NRT-HDR: Graduate Traineeship in Data Science Technologies and Applications Borko Furht (PI), Taghi Khoshgoftaar (Co-PI), Ruth Tappen (Co-PI), Elan Barenholtz (Co-PI), Janet Robishaw (Co-PI), **Xingquan Zhu** (Sen. Personnel), Oge Marques (Sen. Personnel), Jinwoo Jang (Sen. Personnel), Hari Kalva (Sen. Personnel)

Sponsor: National Science Foundation (NSF) Duration: 2020-2025 Amount: \$2,400,000

#### **Expired Projects**

NSF Student Travel Grant for the 2022 IEEE International Conference on Data Mining (IEEE ICDM 2022);
 Xingquan Zhu (PI)

Sponsor: National Science Foundation (NSF)

Duration: 2022-2023 Amount: \$30,000

8. NSF Student Travel Grant for the 2021 IEEE International Conference on Big Data (IEEE BigData 2021); Xingquan Zhu (PI)

Sponsor: National Science Foundation (NSF) Duration: 2021-2022 Amount: \$25,000

9. RAPID: COVID-19 Coronavirus Testbed and Knowledge Base Construction and Personalized Risk Evaluation; **Xingquan Zhu** (PI), Michael DeGiorgio (Co-PI), Massimo Caputi (Co-PI) Sponsor: National Science Foundation (NSF) Duration: 2020-2021 Amount: \$90,000

10. Developing Machine Learning Financial Modeling Algorithms for early-stage technology companies to predict their success, **Xingquan Zhu** (PI), Borko Furth (Co-PI)

Sponsor: NSF (FAU I/UCRC, FAU Tech-runway) Duration: 2021 – 2022 Amount: \$49,520

11. Collaborative Research: Cyber-Training: Pilot: Interdisciplinary Training of Data-Centric Security and Resilience of Cyber-Physical Energy Infrastructures

Yufei Tang (PI), James VanZwieten (Co-PI), Jason Hallstrom (Co-PI), **Xingquan Zhu** (Co-PI) Sponsor: National Science Foundation (NSF)

Duration: 2020-2022

Amount: \$160,000

**12.** Artificial Intelligence for Tackling Online Cruelty, Toxicity, and Bullying Xingquan Zhu (PI), Sameer Hinduja (Co-PI), Borivoje Furht (Co-PI), and Kevin Lanning (Co-PI) Sponsor: FAU College of Eng. & Computer Science Duration: 2020-2021 Amount: \$25,000

**13.** Development of Curriculum and Hands-on Deep Learning Labs for IoT Cybersecurity Yufei Tang, **Xingquan Zhu** (Co-PI), Zhuo Lu (Co-PI)

Sponsor: Cyber Florida Duration: 2019-2020 Amount: \$60,000

**14.** Privacy Preserving Protocols for Big Data Analytics Mehrdad Nojoumian (PI), **Xingquan Zhu** (Co-PI), and Elias Bou-Harb (Co-PI)

Sponsor: FAU College of Engineering and Computer Science; 2019-2020 Amount: \$25,000

15. MRI: Acquisition of Artificial Intelligence & Deep Learning (AIDL) Training and Research Laboratory Xingquan Zhu (PI), Taghi Khoshgoftaar (Co-PI), Dimitris Pados (Co-PI), Hanqi Zhuang (Co-PI), and Laurent Cherubin (Co-PI)

Sponsor: National Science Foundation Duration: 2018-2021 Amount: \$652,850

**16.** Real-Time Bidding Price Optimization; **Xingquan Zhu** (PI)

Sponsor: Bidtellect.com Duration: 2016 - 2019 Amount: \$89,915

17. NSF I/UCRC: Machine Learning Algorithms for Uses Cases in Auto Industry Xingquan Zhu (PI) and Borko Furht

Sponsor: NSF (FAU I/UCRC, JM Family)

Duration: 2016 - 2017 Amount: \$39,809

18. NSF I/UCRC: Application of Common Machine Learning Algorithms for Uses Cases in Auto Industry – Phase 2; Dingding Wang (PI), Xingquan Zhu (Co-PI), and Borko Furht (Co-PI)

Sponsor: NSF (FAU I/UCRC, IM Family)

Duration: 2017-2018 Amount: \$60,087

19. PFI:AIR - TT: A Clinical Predictive Model Based Smart Decision Support System for Congestive Obstructive Pulmonary Disease (COPD) related Re-hospitalization

Ankur Agarwal (PI), Andrew Duffell, Ravi Behara, and Xingquan Zhu (Co-PI)

Sponsor: National Science Foundation (IIP: 1444949) Duration: 2014 - 2016 Amount: \$199,594

20. MRI: Acquisition of Big Data Training and Research Laboratory; Taghi Khoshgoftaar (PI), Ramesh Teegavarapu, Hari Kalva, Xingquan Zhu (Co-PI), and Pierre-Philippe Beaujean. Sponsor: National Science Foundation (CNS: 1427536) Duration: 2014-2017 Amount: \$600,000

21. Database-centric data analysis of molecular simulations; Xingquan Zhu (PI) Sponsor: National Institutes of Health (subcontract NIH 1R01GM086707-01A1)

> Duration: 2010 - 2015 Amount: \$ 56,319

22. Comparative Pancreatic Cancer Study Using Discriminative Gene Regulatory Network Xingguan Zhu (PI)

Sponsor: American Cancer Society Institute Research Grants (ACS-IRG)

Duration: 2009 Amount: \$ 30,000

23. ICHECK: Identifying Deception Data with Impact-Sensitive Instance Ranking

Xingquan Zhu (PI) and Xindong Wu (Co-PI)

Sponsor: NSF-EPSCoR Duration: 2005 Amount: \$ 25,000

24. Pattern Matching with Wildcards and Length Constraints

Xindong Wu (PI), Abdullah N. Arslan, and Xingquan Zhu (Co-PI)

Sponsor: NSF (CCF-0514819) Duration: 2005-2008 Amount: \$ 200,000

# **Industry Research Donation**

1. FAU Bidtellect Laboratory (https://bidtellect.fau.edu)

**Xingquan Zhu** (Leading Lab Director)

Sponsor: Bidtellect.com

Duration: 2017-2022 Amount: \$300,000.0

## **Keynote Speech**

- The 9th IEEE International Conference on Big Data Analytics (ICBDA), March 16-18, 2024, Tokyo, Japan
- The 7th IEEE International Conference on Data Science, in Cyberspace, July 11-13, 2022, Guilin, China
- IEEE DSC 2017 Workshop on Data Science and Web Analytics, June 26, 2017, Shenzhen, China.
- Data Mining track of the 30th Florida Artificial Intelligence Research Society annual conference (FLAIRS-30), May 16-18, 2016, Key Largo, Florida, USA
- IEEE ICDM 2014 Workshop on Scalable Data Analytics: Theory and Applications, Dec. 14-17, 2014, Shenzhen,
- The First International Conference on Data Science, May 27-28, 2014, Beijing, China.

#### **Tutorial**

- The 2<sup>nd</sup> IEEE International Conference on Data Science in Cyberspace, June 26-29, 2017, Shenzhen, China.
  - o Title: Data Science in Online Digital Advertising

## **Conference Panellist**

- Panel Member: 23<sup>rd</sup> IEEE International Conference on Data Mining (ICDM-2023), *On Computing Paradigms: Where will Large Language Models Be Going*, December 3, 2023
- Panel Member: Engineering Research Center (ERC) Workshop on Building Smart Cities Ethically: Beyond Engineering for Engineers, August 31, 2023
- Panel Member: FAU Undergraduate Research Symposium: Harnessing the power of ChatGPT ethically: An interactive panel, April 7, 2023.
- Panel Coordinator: 22<sup>nd</sup> IEEE International Conference on Data Mining (ICDM-2022), *Full Stack Artificial Intelligence: The missing pieces*, November 30, 2022.
- Panel Member: Florida Atlantic University Instructional Faculty AI Academics & Integrity Summit, Feb 6, 2022
- Panel Member: Florida International University Critical Technology and Intelligence Summit, Jack D. Gordon Institute for Public Policy, Florida International University, Miami, FL, September 17, 2019.

## **Best Paper Award**

- T. Guo, X. Zhu, Y. Wang, F. Chen, Weak Supervision Network Embedding for Constrained Graph Learning, Proc. of the 25<sup>th</sup> Pacific Asian Conference on Knowledge Discovery and Data Mining (PAKDD-21), May 11-14, 2021, Delhi, India (Best Paper Award)
- M. Wu, S. Pan, and X. Zhu, OpenWGL: Open-World Graph Learning, Proc. of the 20th IEEE International Conference on Data Mining, Sorrento, Italy, Nov 17-23, 2020 (Best Student Paper Award)
- Z. Gharibshah and X. Zhu, TriNE: Network Representation Learning for Tripartite Heterogeneous Networks, Proc. Of the 11<sup>th</sup> IEEE International Conference on Knowledge Graph (ICKG-2020), August 9-11, 2020, Nanjing China (Best Student Paper Award)
- G. Rasario, T. Sonderman, and X. Zhu, Deep Transfer Learning for Traffic Sign Recognition, *IEEE International Conference on Information Reuse and Integration (IRI-2018)*, July 6-9, 2018, Salk Late City, USA (Best Paper Award)
- L. Chi, B. Li, and **X. Zhu**, Fast Graph Stream Classification Using Discriminative Clique Hashing, Proc. Of the 17<sup>th</sup> Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD-2013), April 14-17, Brisbane, Australia. (Best Paper Award)
- M. Fang and X. Zhu, I Don't Know the Label: Active Learning with Blind Knowledge, Proc. Of the 21<sup>st</sup>
   International Conference on Pattern Recognition (ICPR-12), November 11-15, 2012, Tsukuba, Japan. (Best Student Paper Award)
- Y. Zhang, **X. Zhu**, X. Wu, and J. P. Bond, ACE: An Aggressive Classifier Ensemble with Error Detection, Correction and Cleansing, *Proc. of the 17th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)*, Hong Kong, November 14-16, 2005. (**Best Paper Award**)

## **IEEE Digital Library Most Popular Papers**

- Xindong Wu, Xingquan Zhu, Gong-Qing Wu, Wei Ding: Data Mining with Big Data. *IEEE Transactions on Knowledge and Data Engineering*, 26(1): 97-107, 2014.
  - Cited over 3,300 times, and TKDE most popular article (evidenced in the Scholarly citations)
- Daokun Zhang, Jie Yin, **Xingquan Zhu**, and Chengqi Zhang, Network Representation Learning: A Survey, IEEE Trans. On Big Data, 6(1):3-28, 2020.

# **IJCAI Most Influential Paper**

• Shirui Pan, Jia Wu, **Xingquan Zhu**, Chengqi Zhang, Yang Wang, Tri-Party Deep Network Representation, *Proc. of the 25<sup>th</sup> International Joint Conference on Artificial Intelligence (IJCAI)*, July 9-16, 2016. New York, USA.

https://www.paperdigest.org/2021/02/most-influential-ijcai-papers/

#### **Award and Honors**

- 2023 IEEE ICDM Outstanding Service Award (Award citation: https://icdm.zhonghuapu.com/Awards/23Service.shtml)
- Fellow of the Institute of Electrical and Electronics Engineers (IEEE), 2023
- Fellow of the Asia-Pacific Artificial Intelligence Association (AAIA), 2023
- World's AI To Scientist, International Artificial Intelligence Industry Alliance (AIIA), 2023
- College of Engineering & Computer Science Distinguished Teacher of the Year (DTOY) Nominee, 2023
- Volunteer Award, IEEE Technical Community on Intelligent Informatics, 2022.
- College of Engineering & Computer Science Distinguished Teacher of the Year (DTOY) Nominee, 2022
- Outstanding Engineering Achievement Merit Award: The Engineers' Council, 2019
- Excellence in Research Award (Senior Faculty): College of Engineering and Computer Science, Florida Atlantic University, 2019
- Australian Research Council (ARC) Future Fellowship (Level 2), 2010

# **Grant Reviewers/Panel Members**

- National Science Foundation Panelist (2023, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015)
- National Institute of Health (2009)
- Natural Sciences and Engineering Research Council, Canada (2015, 2009)
- Marsden Fund Council, Royal Society of New Zealand, New Zealand (2014)
- Australian Research Council, Australia (2017, 2016, 2015)
- National Intelligence and Security Discovery Research Grants Program (NISDRG), Australia (2020)
- National Science Foundations, China (2011, 2010, 2009, 2008)
- Croatian Science Foundation, Croatia (2019)
- Hong Kong Research Grants Council, Hong Kong (2022, 2018)
- IEEE Computer Society Fellow Committee (2023)

# Research Work Featured by Press Release (Recent Years)

- AI model proactively predicts if a COVID-19 test might be positive or not, Science Daily, Dec. 13, 2022 https://www.sciencedaily.com/releases/2022/12/221213094833.htm
- How Data Analytics Are Used in Marketing, South China Morning Post, January 2022
   <a href="https://www.scmp.com/presented/business/topics/value-data/article/3161535/how-data-analytics-are-used-marketing">https://www.scmp.com/presented/business/topics/value-data/article/3161535/how-data-analytics-are-used-marketing</a>
- Novel method predicts if COVID-19 clinical trials will fail or succeed, EurekAlert, July 2021 https://www.eurekalert.org/news-releases/590825
- Predictive Analytics Tools Forecast COVID-19 Surges Globally, Health IT Analytics, June 2020 <a href="https://healthitanalytics.com/news/predictive-analytics-tools-forecast-covid-19-surges-globally">https://healthitanalytics.com/news/predictive-analytics-tools-forecast-covid-19-surges-globally</a>
- Machine Learning Powers COVID-19 Risk Assessment Dashboard, Health IT Analytics, 2020 https://healthitanalytics.com/news/machine-learning-powers-covid-19-risk-assessment-dashboard
- COVID-19 Knowledge Base and Risk Assessment Tool is Powered by AI, News Desk, Florida Atlantic University, June 2020.
   https://www.fau.edu/newsdesk/articles/covid-tool-ai.php

 Florida's First NSF-Funded AI and Deep Learning Laboratory, News Desk, Florida Atlantic University, Jan 10, 2019

https://www.fau.edu/newsdesk/articles/nsf-aidl-lab.php

## **Selected Professional Services**

- 1. Associate Editor:
  - a. IEEE Trans. on Knowledge and Data Engineering (2008-2012, 2014 2021).
  - b. ACM Transactions on Knowledge Discovery from Data (2017–date).
  - c. Journal of Big Data (Springer, 2013 date)
  - d. Journal of Social Network Analysis and Mining (Springer, 2010 date)
  - e. Network Modelling Analysis in Health Informatics and Bioinformatics (Springer, 2014-date)
- 2. Guest Editor
  - a. Neural Processing Letters, Special Issue on Transfer learning (Springer, 2022)
  - b. Distributed and Parallel Databases, Special Issue on Scientific and Statistical Data Management in the Age of AI 2021 (Springer, 2022)
  - c. Applied Intelligence, Special Issue on Multi-View Learning (Springer, 2021)
- 3. Conference General Co-Chair
  - a. IEEE International Conference on Big Data (IEEE BigData), 2021
- 4. Conference Program Committee Co-Chair
  - a. The 22nd IEEE International Conference on Data Mining (ICDM), 2022.
  - b. The 33rd International Conference on Scientific and Statistical Database Management (SSDBM-2021), 2021
- 5. Conference Program Committee Vice Chairs, Area Chairs, or Senior PC
  - a. ACM International Conference on Knowledge Discovery from Data (SIGKDD), 2023-2017
  - b. IEEE International Conference on Data Mining (ICDM), 2021-2017
  - c. ACM International Conference on Information and Knowledge Management (CIKM), 2022-2017
  - d. AAAI International Conference on Artificial Intelligence (AAAI), 2024, 2022, 2019
- 6. Steering Committee
  - a. International Conference on Scientific and Statistical Database Management (SSDBM), 2023

# Selected Publications (Over 130 journal articles and 170 conference proceeding papers)

#### Selected Books/Proceedings (Since 2017):

- Xingquan Zhu, Sanjay Ranka, My T. Thai, Takashi Washio, Xindong Wu, IEEE Intl. Conference on Data Mining, ICDM 2022, Orlando, FL, USA, November 28 Dec. 1, 2022, IEEE 2022, ISBN 978-1-6654-5099-7
- Yixin Chen, Heiko Ludwig, Yicheng Tu, Usama M. Fayyad, **Xingquan Zhu**, Xiaohua Hu, et al. 2021 IEEE International Conference on Big Data (Big Data), Orlando, FL, USA, December 15-18, 2021. IEEE 2021, ISBN 978-1-6654-3902-2
- Qiang Zhu, Xingquan Zhu, Yicheng Tu, Zichen Xu, Anand Kumar, SSDBM 2021: 33rd International Conference on Scientific and Statistical Database Management, Tampa, FL, USA, July 6-7, 2021. ACM 2021, ISBN 978-1-4503-8413-1
- Xingquan Zhu, Haicheng Tao, Zhiang Wu, Jie Cao, Kristopher Kalish, Jeremy Kayne: Fraud Prevention in Online Digital Advertising. Springer Briefs in Computer Science, Springer 2017, ISBN 978-3-319-56792-1.

#### **Selected Conference Publications (Since 2017):**

- 1. Xin Zheng, Miao Zhang, Chunyang Chen, Quoc V. Hung Nguyen, **Xingquan Zhu**, Shirui Pan, Structure-free Graph Condensation. *Thirty-seventh Conference on Advances in Neural Information Processing Systems* (*NeurIPS*), New Orleans, USA, Dec. 10-16, 2023.
- 2. Boyu Li, Ting Guo, **Xingquan Zhu**, Yang Wang, Fang Chen, ConGCN: Factorized Graph Convolutional Networks for Consensus Recommendation. *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD)*, pp.369-386, Turin, Italy. Sept. 18-22, 2023.

- 3. Boyu Li, Ting Guo, **Xingquan Zhu**, Qian Li, Yang Wang, Fang Chen, SGCCL: Siamese Graph Contrastive Consensus Learning for Personalized Recommendation. *Proceedings of the Sixteenth ACM International Conference on Web Search and Data Mining (WSDM)*, Singapore, Feb 27- March3, 2023.
- 4. Xindong Wu, **Xingquan Zhu**, Elena Baralis, Ruqian Lu, Vipin Kumar, Leszek Rutkowski, Jie Tang, On Computing Paradigm Where Will Large Language Models Be Going, *Proc. of the 23<sup>rd</sup> IEEE International Conference on Data Mining (ICDM)*, Dec. 1-4, 2023.
- 5. Zhabiz Gharibshah, **Xingquan Zhu**, Local Contrastive Feature Learning for Tabular Data. 31st ACM International Conference on Information & Knowledge Management (CIKM), Atlanta, GA, USA, October 17-21, 2022.
- 6. Man Wu, **Xingquan Zhu**, Temporal Adaptive Aggregation Network for Dynamic Graph Learning. *IEEE International Conference on Big Data*, pp.806-811, Osaka, Japan, Dec. 17-20, 2022.
- 7. Yufei Jin, Xingquan Zhu, Predictive Masking for Semi-Supervised Graph Contrastive Learning. *IEEE International Conference on Big Data*, pp.1266-1271, Osaka, Japan, Dec. 17-20, 2022.
- 8. Cihan Ulus, Zhiqiang Wang, Sheikh M. A. Iqbal, K. Md. Salman Khan, **Xingquan Zhu**, Transfer Naïve Bayes Learning using Augmentation and Stacking for SMS Spam Detection. *IEEE International Conference on Knowledge Graph (ICKG)*, pp.275-282, Orlando, FL, USA, November 30 Dec. 1, 2022.
- 9. Ting Guo, **Xingquan Zhu**, Yang Wang, and Fang Chen, Weak Supervision Network Embedding for Constrained Graph Learning, *Proc. of the* 25<sup>th</sup> *Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)*, Delhi, India, May 11-14, 2021.
- 10. Min Shi, Yufei Tang, **Xingquan Zhu**, David A. Wilson, Jianxun Liu, *Multi-Class Imbalanced Graph Convolutional Network Learning. Proc. of the 29th International Joint Conference on Artificial Intelligence (IJCAI)*, pp.2879-2885, Jan 7-15, 2021.
- 11. Ting Guo, **Xingquan Zhu**, Yang Wang, Fang Chen, Graph Compression Networks. *IEEE International Conference on Big Data*, pp.1030-1036, Orlando, FL, USA, December 15-18, 2021
- 12. Yu Huang, Chao Zhang, Jaswanth K. Yella, Sergei Petrov, Xiaoye Qian, Yufei Tang, **Xingquan Zhu**, Sthitie Bom, *IEEE International Conference on Big Data*, pp.746-756, Orlando, FL, USA, December 15-18, 2021.
- 13. Man Wu, Shirui Pan, and Xingquan Zhu, OpenWGL: Open-World Graph Learning, *Proc. of the 20th IEEE International Conference on Data Mining (ICDM)*, Sorrento, Italy, Nov 17-23, 2020 (Best Student Paper Award)
- 14. Zhabiz Gharibshah and Xingquan Zhu, TriNE: Network Representation Learning for Tripartite Heterogeneous Networks, *Proc. Of the 11th IEEE International Conference on Knowledge Graph* (ICKG), pp.497-504. August 9-11, 2020, Nanjing China (Best Student Paper Award)
- 15. Anak Wannaphaschaiyong and **Xingquan Zhu**, COPD Disease Classification using Network Embedding with Synthetic Relationships, Proc. of the The 33rd Florida Artificial Intelligence Research Society International Conference (FLAIRS), North Miami Beach, Florida, May 17-20, 2020.
- 16. Yuping Su, **Xingquan Zhu**, Bei Dong, Yumei Zhang, and Xiaojun Wu, MedFroDetect: Medicare Fraud Detection with Extremely Imbalanced Class Distributions, Proc. of the The 33rd Florida Artificial Intelligence Research Society International Conference (FLAIRS), North Miami Beach, Florida, May 17-20, 2020.
- 17. Shuwen Wang, Magdalyn E. Elkin, and **Xingquan Zhu**, Imbalanced Learning for Hospital Readmission Prediction using National Readmission Database, *Proc. Of the 11th IEEE International Conference on Knowledge Graph* (ICKG), pp. 116-122, August 9-11, 2020, Nanjing China.
- 18. Lukasz Chmielewski, Rafina Amin, Anak Wannaphaschaiyong, **Xingquan Zhu**, Network Analysis of Technology Stocks using Market Correlation, *Proc. Of the 11<sup>th</sup> IEEE International Conference on Knowledge Graph* (ICKG), pp. 267-274, August 9-11, 2020, Nanjing China.
- 19. Man Wu, Shirui Pan, Chuan Zhou, Xiaojun Chang, and **Xingquan Zhu**, Unsupervised Domain Adaptive Graph Convolutional Networks, In Proc. Of the International World Wide Web Conference (WWW), Taipei, April 20-24, 2020.

- 20. Man Wu, Shirui Pan, Lan Du, Ivor Tsang, **Xingquan Zhu**, Bo Du, Long-short Distance Aggregation Networks for Positive Unlabeled Graph Learning, In Proc. of the 28th ACM International Conference on Information and Knowledge Management (CIKM-2019), Beijing, China, Nov 3-7, 2019.
- 21. Man Wu, Shirui Pan, Xingquan Zhu, Chuan Zhou, Lei Pan, Domain-Adversarial Graph Neural Networks for Text Classification, In Proc. of the 19th IEEE International Conference on Data Mining (ICDM-2019), Beijing, China, Nov 8-11, 2019.
- 22. Shichao Zhu, Chuan Zhou, Shirui Pan, **Xingquan Zhu**, and Bin Wang, Relation Structure-Aware Heterogeneous Graph Neural Network, In Proc. of the 19th IEEE International Conference on Data Mining (ICDM-2019), Beijing, China, Nov 8-11, 2019
- 23. Magdalyn Elkin, Whitney A.J. Andrews, **Xingquan Zhu**. Network Analysis and Recommendation for Infectious Disease Clinical Trial Research. In Proc. of the 10th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (BCB-2019), Niagara Falls, New York, September 7-10, 2019
- 24. Ting Guo, **Xingquan Zhu**, Yang Wang, and Fang Chen, Discriminative Sample Generation for Deep Imbalanced Learning. *In Proc. Of the 28<sup>th</sup> International Joint Conference on Artificial Intelligence (IJCAI)*, August 10-16, 2019, Macau, China.
- 25. Zhabiz Gharibshah, **Xingquan Zhu**, Arthur Hainline, and Michael Conway, Deep Learning for Online Display Advertising User Clicks and Interests Prediction. *In Proc. of the Asian Pacific Web and Web-Age Information Management Joint Conference (WPWeb-WAIM)*, August 1-3, 2019.
- 26. Huimei Han, **Xingquan Zhu**, Ying Li, EDLT: Enabling Deep Learning for Generic Data Classification. *In Proc. of the 18th IEEE International Conference on Data Mining (ICDM)*, pp. 147-156, November 17-20, Singapore, 2018.
- 27. Daokun Zhang, Jie Yin, **Xingquan Zhu**, Chengqi Zhang, SINE: Scalable Incomplete Network Embedding. *In Proc. of the 18th IEEE International Conference on Data Mining (ICDM)*, pp.737-746, November 17-20, Singapore, 2018.
- 28. Haibo Wang, Chuan Zhou, Jia Wu, Weizhen Dang, **Xingquan Zhu**, Jilong Wang, Deep Structure Learning for Fraud Detection. *In Proc. of the 18th IEEE International Conference on Data Mining (ICDM)*, pp.567-576, November 17-20, Singapore, 2018.
- 29. Eric Golinko, Thomas Sonderman, **Xingquan Zhu**, Learning Convolutional Neural Networks from Ordered Features of Generic Data. *IEEE International Conf. on Machine Learning and Applications (ICMLA)*, pp.897-900, 2018.
- 30. Grant Rosario, Thomas Sonderman, **Xingquan Zhu**, Deep Transfer Learning for Traffic Sign Recognition. *IEEE International Conf. on Information Reuse and Integration (IRI)*, pp.178-185, 2018. **(Best Paper Award)**.
- 31. Charles Wheelus, Elias Bou-Harb, **Xingquan Zhu**, Tackling Class Imbalance in Cyber Security Datasets. *IEEE International Conf. on Information Reuse and Integration (IRI)*, pp.229-232, 2018.
- 32. Daokun Zhang, Jie Yin, **Xingquan Zhu**, Chengqi Zhang, MetaGraph2Vec: Complex Semantic Path Augmented Heterogeneous Network Embedding. *Pacific Asia International Conf. on Knowledge Discovery and Data Mining (PAKDD)*, pp.196-208, 2018.
- 33. **Xingquan Zhu**, Jose Hurtado, Haicheng Tao, Localized sampling for hospital re-admission prediction with imbalanced sample distributions. pp. 4571-4578, *International Joint Conference on Neural Networks* (*IJCNN*), Anchorage, Alaska, USA, May 14-19, 2017.
- 34. Eric Golinko and **Xingquan Zhu**, GFEL: Generalized Feature Embedding Learning Using Weighted Instance Matching, *IEEE International Conference on Information Reuse and Integration (IRI)*, San Diego, USA, Aug. 4-6, 2017.
- 35. Hui Liu, **Xingquan Zhu**, Kristopher Kalish, and Jeremy Kayne, ULTR-CTR: Fast Page Grouping using URL Truncation for Real-time Click Through Rate Estimation, *IEEE International Conference on Information Reuse and Integration (IRI)*, San Diego, USA, Aug. 4-6, 2017.
- 36. Daokun Zhang, Jie Yin, Xingquan Zhu, and Chengqi Zhang, User Profile Preserving Social Network

- Embedding, International Joint Conference on Artificial Intelligence (IJCAI), Melbourne, Australia, August 19-25, 2017.
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