

Ji Yang (Carl)

(+1) (217) 417-5987
j.carlyang AT emory.edu

Assistant Professor, Emory University
400 Dowman Drive W401, Atlanta, GA 30322

ACADEMIC BACKGROUNDS

Department of Computer Science, Emory University *Aug. 2020 - present*
Tenure-Track Assistant Professor *Atlanta, GA, US*

- Research interests: graph data mining, applied machine learning, structured information systems; knowledge bases, recommender systems, social networks, biomedical informatics, healthcare.
- CSI Ph.D. Admission Committee, Dean's Teaching Fellowship Faculty Committee.

Intelligent Systems Lab, Oxford University *Apr. 2020 - Dec. 2021*
Postdoctoral Research Fellow, Supervisor: Thomas Lukasiewicz *Oxford, UK*

- Research interests: multi-modality knowledge extraction, question answering, commonsense reasoning.

Data Mining Group, University of Illinois, Urbana Champaign *Aug. 2014 - Dec. 2020*
Ph.D. in Computer Science, Research Assistant, Teaching Assistant
Committee: Jiawei Han (chair), Jian Peng, Chengxiang Zhai, Jure Leskovec *Urbana, IL, US*

- Thesis: Multi-Facet Graph Mining with Contextualized Projections.
- Yunni & Maxine Pao Memorial Fellowship for research accomplishments and leadership activities.
- **Best Paper Award** of ICDM 2020 (1 from 930 submissions).
- UIUC 2020 Doctoral Dissertation Completion Fellowship (awarded to 20 candidates from 20 departments out from 74 nominations from 48 departments across the whole university).
- KDD Dissertation Award Nomination (11 in total world-wide).

Chu Kochen Honors College, Zhejiang University *Sep. 2010 - Jun. 2014*
B.Eng. in Computer Science & Technology, Advisor: Xiaofei He *Hangzhou, Zhejiang, China*

- GPA: Major: 3.97/4.0, Overall: 3.86/4.0; Ranking: Top 2% of 201 students.
- Chinese National Scholarship for Outstanding Merits, Zhejiang University (Top 1%).
- Chinese National Fellowship for Excellent Intellectuals in Research, Zhejiang University (Top 1%).

SELECTED PUBLICATIONS

Since 2021 (Tenure-Track):

- Hejie Cui, Wei Dai, Yanqiao Zhu, Xiaoxiao Li, Lifang He, **Carl Yang**: *Interpretable Graph Neural Networks for Connectome-Based Brain Disorder Analysis*. Proceedings of the International Conference on Medical Image Computing and Computer Assisted Intervention (**MICCAI**), 2022.
- **Carl Yang**, Hongwen Song, Mingyue Tang, Leon Danon, Ymir Vigfusson: *Dynamic Network Anomaly Modeling of Cell-Phone Call Detail Records for Infectious Disease Surveillance*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), **Best Paper Award of Health Day**, 2022.
- Yanchao Tan, Chengjun Kong, Leisheng Yu, Pan Li, Chaochao Chen, Xiaolin Zheng, Vicki Hertzberg, **Carl Yang**: *4SDrug: Symptom-based Set-to-set Small and Safe Drug Recommendation*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2022.
- Yi Yang, Yanqiao Zhu, Hejie Cui, Xuan Kan, Lifang He, **Carl Yang**: *Data-Efficient Brain Connectome Analysis via Multi-Task Meta-Learning*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2022.
- Junru Chen, Yang Yang, Tao Yu, Yingying Fan, Xiaolong Mo, **Carl Yang**: *BrainNet: Epileptic Wave Detection from SEEG with Hierarchical Graph Diffusion Learning*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2022.

- Yuanxin Zhuang, Lingjuan Lyu, Chuan Shi, **Carl Yang**, Lichao Sun: *Data-Free Adversarial Knowledge Distillation for Graph Neural Networks*. Proceedings of the International Joint Conference on Artificial Intelligence (**IJCAI**), 2022.
- Yuxin Xiao, Zecheng Zhang, Yuning Mao, **Carl Yang**, Jiawei Han: *SAIS: Supervising and Augmenting Intermediate Steps for Document-Level Relation Extraction*. Proceedings of the Annual Conference of the North American Chapter of the Association for Computational Linguistics (**NAACL**), **Oral**, 2022.
- Yanqiao Zhu, Hejie Cui, Lifang He, Lichao Sun, **Carl Yang**: *Joint Embedding of Structural and Functional Brain Networks with Graph Neural Networks for Mental Illness Diagnosis*. Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society (**EMBC**), 2022.
- Yanchao Tan, **Carl Yang**, Xiangyu Wei, Chaochao Chen, Weiming Liu, Longfei Li, Jun Zhou and Xiaolin Zheng: *MetaCare++: Meta-Learning with Hierarchical Subtyping for Cold-Start Diagnosis Prediction in Healthcare Data*, Proceedings of the ACM International Conference on Research and Development in Information Retrieval (**SIGIR**), 2022.
- Kai Zhang, Yu Wang, Hongyi Wang, Lifu Huang, **Carl Yang**, Lichao Sun: *Efficient Federated Learning on Knowledge Graphs via Privacy-preserving Relation Embedding Aggregation*. Workshop on Federated Learning for Natural Language Processing: The Annual Meeting of the Association for Computational Linguistics (**FL4NLP**), 2022.
- Xuan Kan, Hejie Cui, Ying Guo, **Carl Yang**: *FBNetGen: Task-aware GNN-based fMRI Analysis via Functional Brain Network Generation*. Proceedings of the International Conference on Medical Imaging with Deep Learning (**MIDL**), 2022.
- **Carl Yang**, Mingyue Tang, Pan Li: *Graph Auto-Encoder via Neighborhood Wasserstein Reconstruction*. Proceedings of the International Conference on Learning Representations (**ICLR**), 2022.
- Yiqing Xie, Zhen Wang, **Carl Yang**, Yaliang Li, Bolin Ding, Hongbo Deng, Jiawei Han: *KoMen: Domain Knowledge Guided Interaction Recommendation for Emerging Scenarios*. Proceedings of the International World Wide Web Conference (**WWW**), 2022.
- Zhaoming Kong, Aditya Kendre, Jun Yu, Hao Peng, **Carl Yang**, Lichao Sun, Alex Leow, Lifang He: *Structure-Preserving Graph Kernel for Brain Network Classification*. Proceedings of the the IEEE International Symposium on Biomedical Imaging (**ISBI**), 2022.
- Yanqiao Zhu, Yichen Xu, Hejie Cui, **Carl Yang**, Qiang Liu, Shu Wu: *Structure-Enhanced Heterogeneous Graph Contrastive Learning*. Proceedings of the SIAM International Conference on Data Mining (**SDM**), 2022.
- Hejie Cui, Jiaying Lu, Yao Ge, **Carl Yang**: *How Can Graph Neural Networks Help Document Retrieval: A Case Study on COVID19 with Concept Map Generation*. Proceedings of the European Conference on Information Retrieval (**ECIR**), 2022.
- Yanchao Tan, **Carl Yang**, Xiangyu Wei, Chaochao Chen, Longfei Li, Xiaolin Zheng: *Enhancing Recommendation with Automated Tag Taxonomy Construction in Hyperbolic Space*. Proceedings of the IEEE International Conference on Data Engineering (**ICDE**), 2022.
- Ke Zhang, **Carl Yang**, Xiaoxiao Li, Lichao Sun, Siu Ming Yiu: *Subgraph Federated Learning with Missing Neighbor Generation*. Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), **Spotlight**, 2021.
- Han Xie, Jing Ma, Li Xiong, **Carl Yang**: *Federated Graph Classification over Non-IID Graphs*, Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), 2021.
- **Carl Yang**, Qi Zhu, Yidan Xu, Haonan Wang, Chao Zhang, Jiawei Han: *Transfer Learning of Graph Neural Networks with Ego-graph Information Maximization*. Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), 2021.
- Jamie Cui, Chaochao Chen, Lingjuan Lyu, **Carl Yang**, Wang Li: *Exploiting Data Sparsity in Secure Cross-Platform Social Recommendation*. Proceedings of the Conference on Neural Information Processing Systems (**NeurIPS**), 2021.

- Di Jin, Zhizhi Yu, Dongxiao He, Carl Yang, Philip S. Yu, Jiawei Han: *GCN for HIN via Implicit Utilization of Attention and Meta-paths*. IEEE Transactions on Knowledge and Data Engineering (TKDE), 2021.
- Chen Ling, **Carl Yang**, Liang Zhao: *Deep Generation of Heterogeneous Networks*. Proceedings of the IEEE International Conference on Data Mining (ICDM), 2021.
- Sai Vidhyaranya Nuthalapati, Ramraj Chandradevan, Eleonora Giunchiglia, Bowen Li, Maxime Kayser, Thomas Lukasiewicz, **Carl Yang**: *Lightweight Visual Question Answering using Scene Graphs*. Proceedings of the ACM International Conference on Information and Knowledge Management (CIKM), 2021.
- Hejie Cui, Wei Dai, Yanqiao Zhu, Xiaoxiao Li, Lifang He, **Carl Yang**: *BrainNNEExplainer: An Interpretable Graph Neural Network Framework for Brain Network based Disease Analysis*. Workshop on Interpretable Machine Learning in Healthcare: The International Conference on Machine Learning (ICML-IMLH), 2021.
- Hejie Cui, Zijie Lu, Pan Li, **Carl Yang**: *On Positional and Structural Node Features for Graph Neural Networks on Non-Attributed Graphs*. Workshop on Deep Learning on Graphs: The ACM International Conference on Knowledge Discovery and Data Mining (KDD-DLG), 2021.
- Xuan Kan, Hejie Cui, **Carl Yang**: *Zero-Shot Scene Graph Relation Prediction through Commonsense Knowledge Integration*. Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD), 2021.
- **Carl Yang**, Haonan Wang, Ke Zhang, Liang Chen, Lichao Sun: *Secure Deep Graph Generation with Link Differential Privacy*. Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI), 2021.
- Gongxu Luo, Hao Peng, Jianxin Li, Lichao Sun, **Carl Yang**, Philip Yu, Lifang He: *Graph Entropy Guided Node Embedding Dimension Selection for Graph Neural Networks*. Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI), 2021.
- Liang Chen, Jintang Li, Qibiao Peng, Yang Liu, Zibin Zheng, **Carl Yang**: *Understanding Structural Vulnerability in Graph Convolutional Networks*. Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI), 2021.
- Haonan Wang, Chang Zhou, **Carl Yang**, Hongxia Yang, Jingrui He: *Controllable Gradient Item Retrieval*. Proceedings of the International World Wide Web Conference (WWW), 2021.
- Wenjie Hu, Yang Yang, Ziqiang Cheng, **Carl Yang**, Xiang Ren: *Time-Series Event Prediction with Evolutionary State Graph*. Proceedings of the ACM International Conference on Web Search and Data Mining (WSDM), 2021.
- Yuanzhen Xie, Zijing Ou, Liang Chen, Yang Liu, Kun Xu, **Carl Yang**, Zibin Zheng: *Learning and Updating Node Embedding on Dynamic Heterogeneous Information Network*. Proceedings of the ACM International Conference on Web Search and Data Mining (WSDM), 2021.
- Yanchao Tan, **Carl Yang**, Xiangyu Wei, Yun Ma, Xiaolin Zheng: *Multi-Facet Recommender Networks with Spherical Optimization*. Proceedings of the IEEE International Conference on Data Engineering (ICDE), 2021.

Before 2021 (Ph.D. Graduation):

- **Carl Yang**, Jieyu Zhang, Jiawei Han: *Co-Embedding Network Nodes and Hierarchical Labels with Taxonomy Based Generative Adversarial Nets*. Proceedings of the IEEE International Conference on Data Mining (ICDM), *Best Paper Award*, 2020.
- **Carl Yang**, Yuxin Xiao, Yu Zhang, Yizhou Sun, Jiawei Han: *Heterogeneous Network Representation Learning: A Unified Framework with Survey and Benchmark*. IEEE Transactions on Knowledge and Data Engineering (TKDE), 2020.
- **Carl Yang**, Aditya Pal, Andrew Zhai, Nickil Pancha, Jure Leskovec, Jiawei Han: *MultiSage: Empowering GCN with Contextualized Multi-Embeddings on Web-Scale Multipartite Networks*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (KDD), 2020.

- **Carl Yang**, Jieyu Zhang, Haonan Wang, Bangzheng Li, Jiawei Han: *Neural Concept Map Generation for Effective Document Classification with Interpretable Structured Summarization*. Proceedings of the ACM International Conference on Research and Development in Information Retrieval (**SIGIR**), 2020.
- **Carl Yang**, Jieyu Zhang, Haonan Wang, Sha Li, Myunghwan Kim, Matthew Walker, Yiyou Xiao, Jiawei Han: *Relation Learning on Social Networks with Multi-Modal Graph Edge Variational Autoencoders*. Proceedings of the ACM International Conference on Web Search and Data Mining (**WSDM**), 2020.
- Yingkui Wang, Di Jin, **Carl Yang**, Jianwu Dang: *Integrating Group Homophily and Individual Personality of Topics Can Better Model Network Communities*. Proceedings of the IEEE International Conference on Data Mining (**ICDM**) 2020.
- Chanyoung Park, **Carl Yang**, Qi Zhu, Donghyun Kim, Hwanjo Yu, Jiawei Han: *Unsupervised Differentiable Multi-aspect Node Representation Learning*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2020.
- Yang Liu, Xianzhuo Xia, Liang Chen, Xiangnan He, **Carl Yang**, Zibin Zheng: *Certifiable Robustness to Discrete Adversarial Perturbations for Factorization Machines*. Proceedings of the ACM International Conference on Research and Development in Information Retrieval (**SIGIR**), 2020.
- Yiqing Xie, Sha Li, **Carl Yang**, Raymond Chi-Wing Wong, Jiawei Han: *When Do GNNs Work: Understanding and Improving Neighborhood Aggregation*. Proceedings of the International Joint Conference on Artificial Intelligence (**IJCAI**), 2020.
- Jiayi Liu, Quan Yuan, **Carl Yang**, He Huang, Chao Zhang, Philip Yu: *DAPred: Dynamic Attention Location Prediction with Long-Short Term Movement Regularity*. Proceedings of the AAAI International Conference on Innovative Applications of Artificial Intelligence (**IAAI**), 2020.
- **Carl Yang**, Peiye Zhuang, Wenhan Shi, Alan Luu, Pan Li: *Conditional Structure Generation through Graph Variational Generative Adversarial Nets*. Proceedings of the (**NeurIPS**), 2019.
- **Carl Yang**, Mengxiong Liu, Frank He, Jian Peng, Jiawei Han: *cube2net: Efficient Quality Network Construction with Data Cube Organization*. PhD forum of the IEEE International Conference on Data Mining (**ICDM**), 2019.
- **Carl Yang**, Jieyu Zhang, Jiawei Han: *Neural Embedding Propagation on Heterogeneous Networks*. Proceedings of the IEEE International Conference on Data Mining (**ICDM**), 2019.
- **Carl Yang**, Lingrui Gan, Zongyi Wang, Jiaming Shen, Jinfeng Xiao, Jiawei Han: *Query-Specific Knowledge Summarization with Entity Evolutionary Networks*. Proceedings of the ACM International Conference on Information and Knowledge Management (**CIKM**), 2019.
- **Carl Yang**, Dai Teng, Siyang Liu, Sayantani Basu, Jieyu Zhang, Jiaming Shen, Chao Zhang, Jingbo Shang, Lance Kaplan, Timothy Harratty, Jiawei Han: *CubeNet: Multi-Facet Hierarchical Heterogeneous Network Construction, Analysis, and Mining*. Demo in the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2019.
- **Carl Yang**, Do Huy Hoang, Tomas Mikolov, Jiawei Han: *Place Deduplication with Embeddings*. Proceedings of the International World Wide Web Conference (**WWW**), 2019.
- **Carl Yang**, Kevin Chang: *Relationship Profiling over Social Networks: Reverse Smoothness from Similarity to Closeness*. Proceedings of the SIAM International Conference on Data Mining (**SDM**), 2019.
- Yuxin Xiao, Zecheng Zhang, **Carl Yang**, ChengXiang Zhai: *Non-local Attention Learning on Large Heterogeneous Information Networks*. Proceedings of the IEEE International Conference on Big Data (**BigData**), 2019.
- Aravind Sankar, Adit Krishnan, Zongjian He, **Carl Yang**: *RASE: Relationship Aware Social Embedding*. Proceedings of the International Joint Conference on Neural Networks (**IJCNN**), 2019.
- Yu Shi, Xinwei He, Naijing Zhang, **Carl Yang**, Jiawei Han: *User-Guided Clustering in Heterogeneous Information Networks via Motif-Based Comprehensive Transcription*. Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (**ECML-PKDD**), 2019.

- Yu Shi, Fangqiu Han, Xinwei He, Xinran He, **Carl Yang**, Jie Luo, Jiawei Han: *mvn2vec: Preservation and Collaboration in Multi-View Network Embedding*. Workshop on Mining and Learning with Graphs: The ACM International Conference on Knowledge Discovery and Data Mining (**KDD-MLG**), 2022 (arXiv, 2018).
- **Carl Yang**, Yichen Feng, Pan Li, Yu Shi, Jiawei Han: *Meta-Graph Based HIN Spectral Embedding: Methods, Analyses and Insights*. Proceedings of the IEEE International Conference on Data Mining (**ICDM**), 2018.
- **Carl Yang**, Mengxiong Liu, Frank He, Xikun Zhang, Jian Peng, Jiawei Han: *Similarity Modeling on Heterogeneous Networks via Automatic Path Discovery*. Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (**ECML-PKDD**), 2018.
- **Carl Yang**, Mengxiong Liu, Vincent Zheng, Jiawei Han: *Node, Motif and Subgraph: Leveraging Network Functional Blocks Through Structural Convolution*. Proceedings of the IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (**ASONAM**), 2018.
- **Carl Yang**, Xiaolin Shi, Jie Luo, Jiawei Han: *I Know You'll Be Back: Interpretable New User Clustering and Churn Prediction on a Mobile Social Application*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2018.
- **Carl Yang**, Chao Zhang, Xuewen Chen, Jieping Ye, Jiawei Han: *Did You Enjoy the Ride: Understanding Passenger Experience via Heterogeneous Network Embedding*. Proceedings of the IEEE International Conference on Data Engineering (**ICDE**), 2018.
- **Carl Yang**, Liyuan Liu, Mengxiong Liu, Zongyi Wang, Chao Zhang, Jiawei Han: *Graph Clustering with Embedding Propagation*. Proceedings of the IEEE International Conference on Big Data (**BigData**), 2020 (arXiv, 2017).
- **Carl Yang**, Hanqing Lu, Kevin Chang: *CONE: Community Oriented Network Embedding*. Proceedings of the International Joint Conference on Neural Networks (**IJCNN**), 2018 (arXiv, 2017).
- Jiaming Shen, Jinfeng Xiao, Yu Zhang, **Carl Yang**, Jingbo Shang, Jinda Han, Saurabh Sinha, Peipei Ping, Richard Weinshilboum, Zhiyong Lu, Jiawei Han: *SetSearch+: Entity-Set-Aware Search and Mining for Scientific Literature*. Demo in the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2018.
- Chao Zhang, Mengxiong Liu, Zhengchao, Liu, **Carl Yang**, Luming Zhang, Jiawei Han: *Spatiotemporal Activity Modeling Under Data Scarcity: A Graph-Regularized Cross-Modal Embedding Approach*. Proceedings of the AAAI International Conference on Artificial Intelligence (**AAAI**), 2018.
- **Carl Yang**, Lanxiao Bai, Chao Zhang, Quan Yuan, Jiawei Han: *Bridging Collaborative Filtering and Semi-Supervised Learning: A Neural Approach for POI Recommendation*. Proceedings of the ACM International Conference on Knowledge Discovery and Data Mining (**KDD**), 2017.
- **Carl Yang**, Zhong Lin, Li-Jia Li, Jie Luo: *Bi-directional Joint Inference for User Links and Attributes on Large Social Graphs*. Proceedings of the International World Wide Web Conference (**WWW**), 2017.
- **Ji Yang**, Bin Xu, Binbin Lin, Xiaofei He: *Multi-Query Parallel Field Ranking for Image Retrieval*. Neurocomputing, 2014.
- Binbin Lin, **Ji Yang**, Xiaofei He, Jieping Ye: *Geodesic Distance Function Learning via Heat Flows on Vector Fields*. Proceedings of the International Conference on Machine Learning (**ICML**), 2014.
- Haifeng Liu, Zheng Yang, **Ji Yang**, Zhaohui Wu, Xuelong Li: *Local Coordinate Concept Factorization for Image Representation*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), 2014.

TEACHING EXPERIENCES

- **Instructor**, CS253 Data Structures and Algorithms, Emory University, 2021 Fall.
- **Instructor**, CS253 Data Structures and Algorithms, Emory University, 2021 Spring.
- **Instructor**, CS584 Topics: Graph Data Mining, Emory University, 2020 Fall.

- **Teaching Assistant**, CS412: Introduction to Data Mining, UIUC/Coursera, 2020 Spring.
- **Lead Teaching Assistant**, CS512: Data Mining: Principles and Algorithms, UIUC, 2019 Spring.
- **Lead Teaching Assistant**, CS512: Data Mining: Principles and Algorithms, UIUC, 2018 Spring.
- **Lead Teaching Assistant**, CS412: Introduction to Data Mining, UIUC, 2017 Spring.
- **Teaching Assistant**, CS511: Advanced Data Management, UIUC, 2016 Spring.
- **Teaching Assistant**, CS412: Introduction to Data Mining, UIUC, 2015 Fall.

INDUSTRY EXPERIENCES

Research Lab, Pinterest Inc

Research Intern, Supervisors: Dr. Aditya Pal, Prof. Jure Leskovec

May. 2019 - Aug. 2019

San Francisco, CA, US

- Empowered GraphSage for web-scale Pinterest graph embedding through efficient graph down-sampling and context-aware conditional aggregation on heterogeneous pin-board networks.

Places Data & AI Research, Facebook Inc.

Research Intern, Supervisors: Dr. Do Huy Hoang, Dr. Tomas Mikolov

May. 2018 - Aug. 2018

New York, NY, US

- Developed a two-step data-driven pipeline of feature generation and metric learning for place embedding to leverage ad-hoc place attributes and noisy training data towards efficient place deduplication.

Economic Graph Research, LinkedIn Co.

Remote Research Contractor, Supervisors: Dr. Myungwan Kim, Dr. Shipeng Yu

Aug. 2018 - Jul. 2019

Sunnyvale, CA, US

- Developed a relation profiling algorithm based on multiple signals including user attributes, link structures and diffusive messages in the social network with novel multi-modal graph autoencoders.

Big Data Research, Didichuxing Inc.

Research Intern, Supervisors: Prof. Xuwen Chen, Prof. Jieping Ye

Jun. 2017 - Aug. 2017

Beijing, China

- Constructed the transportation HIN (heterogeneous information network) based on DiDi's unique travel data and developed a pattern-aware HIN embedding algorithm for passenger experience prediction.

Research Lab, Snap Inc.

Research Intern, Supervisors: Dr. Jie Luo, Dr. Xiaolin Shi, Dr. Li-Jia Li

May. 2016 - Aug. 2016

Los Angeles, CA, US

- Developed a joint learning framework of user links and attributes for friend recommendation and interest targeting. Implemented a Spark pipeline and scaled up to millions of nodes and billions of edges.

Demographics ads serving, Google LLC

Software Engineer Intern, Supervisor: Dr. Tianyi Wu

May. 2015 - Aug. 2015

Seattle, WA, US

- Implemented data extraction and inventory analysis pipeline using flume C++. Implemented an online simulation of ads serving and an offline optimal algorithm based on max flow to analyze the inventory.

SERVICES AND ACTIVITIES

Editorial Boards

- Associate Editor, IEEE Transactions on Big Data, since 2021.
- Associate Editor, Big Data Journal, Mary Ann Liebert, Inc., since 2021.
- Guest Editor, Frontiers in Big Data and Artificial Intelligence, since 2021.

Event Organization

- Web Chair, The ACM Conference on Knowledge Discovery and Data Mining (**KDD**), 2022.
- Workshop Chair, The ACM International Conference on Information and Knowledge Management (**CIKM**), 2022.

- Organizer and Program Chair, The 1st ACM International Workshop on Federated Learning with Graph Data (**FedGraph**), 2022.
- Organizer and Program Chair, The 1st IEEE International Workshop on Neural Network Models for Brain Connectome Analysis (**BrainNN**), 2022.
- Session Chair, The International World Wide Web Conference (**WWW**), 2022.
- Session Chair, The ACM Conference on Knowledge Discovery and Data Mining (**KDD**), 2021.
- Session Chair, The IEEE International Conference on Data Engineering (**ICDE**), 2021.
- Session Chair, The International World Wide Web Conference (**WWW**), 2021.
- Session Chair, The IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (**ASONAM**), 2018.

Paper Reviews

- The International Conference on Machine Learning (**ICML**), since 2019.
- The Conference on Neural Information Processing Systems (**NeurIPS**), since 2019.
- The AAAI Conference on Artificial Intelligence (**AAAI**), since 2019.
- The International Joint Conference on Artificial Intelligence (**IJCAI**), since 2019.
- The ACM Conference on Knowledge Discovery and Data Mining (**KDD**), since 2018.
- The International World Wide Web Conference (**WWW**), since 2018.
- The IEEE International Conference on Data Mining (**ICDM**), since 2018.
- The ACM International Conference on Web Search and Data Mining (**WSDM**), since 2018.
- The SIAM International Conference on Data Mining (**SDM**), since 2018.
- The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (**ECML-PKDD**), since 2017.
- The ACM International Conference on Information and Knowledge Management (**CIKM**), since 2017.
- The International Conference on Web Information Systems Engineering (**WISE**), since 2017.
- The IEEE Transactions on Network Science and Engineering (**TNSE**), since 2020.
- The IEEE Transactions on Big Data (**TBD**), since 2019.
- The ACM Transactions on Information Systems (**TOIS**), since 2019.
- The ACM Transactions on Intelligent Systems and Technology (**TIST**), since 2019.
- The IEEE Multidisciplinary Open Access Journal (**Access**), since 2018.
- The IEEE Transactions on Knowledge and Data Engineering (**TKDE**), since 2018.
- The IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), since 2018.

Research Seminars

- Data Science for Mental Health Group, Alan Turing Institution, London, UK, Mar 2022.
- Weill Cornell Medical College, Cornell University, New York, USA, Feb 2022.
- Department of Computer Science, Purdue University, Indiana, USA, Nov 2021.
- DGL User Group, California, USA, Nov 2021.
- Amazon ML Tech Talk, Washington, USA, Oct 2021.
- University of South California, California, USA, Jul 2021.
- University of Sydney, New South Wales, Australia, Mar 2020.
- University of North Texas and University of Florida, Florida, USA, Mar 2020.
- Emory University, Georgia, USA, Feb 2020.
- Zhejiang University, Zhejiang, China, Jan 2020.
- University of British Columbia and Simon Fraser University, British Columbia, Canada, Dec 2019.
- Northwestern University, Illinois, USA, Nov 2019.
- Great Lakes Workshop on Data Science in the University of Notre Dame, Indiana, USA, Sep 2019.

- Fudan University and Shanghai Jiao Tong University, Shanghai, China, Nov 2018.
- Snap Inc., California, USA, Mar 2018.
- Tsinghua University and University of Science and Technology, Beijing, China, Aug 2017.