EDUCATION

University of Illinois at Urbana-Champaign

Aug 2020 - Present

Ph.D. Student in Computer Science, Department of Computer Science, The Grainger College of Engineering. Advisor: Prof. Tarek Abdelzaher

Shanghai Jiao Tong University

Sep 2015 - Jun 2019

Bachelor of Engineering (Zhiyuan Honors Degree), ACM Honors Class, Department of Computer Science. Advisors: Prof. Yong Yu and Prof. Xiaofeng Gao

Publications

Scribble-to-Painting Transformation with Multi-Task GANs 🖟 🗘

Jinning Li, Yexiang Xue

In International Joint Conference on Artificial Intelligence (IJCAI) 2019

Senti2Pop: Sentiment-Aware Topic Popularity Prediction on Social Media 🖪

Jinning Li, Yirui Gao, Xiaofeng Gao, Yan Shi, Guihai Chen

In IEEE International Conference on Data Mining (ICDM) 2019

DancingLines: An Analytical Scheme to Depict Cross-Platform Event Popularity (2) Tianxiang Gao, Weiming Bao, Jinning Li, X. Gao, B. Kong, Y. Tang, G. Chen, X. Li In International Conference on Database and Expert Systems Applications (DEXA) 2018

Research Experience

Social Sensing Group, University of Illinois at Urbana-Champaign

Ph.D. Student Aug 2020 - Present

- Advisor: Prof. Tarek Abdelzaher
- Graph Variational Autoencoders for Social Network Polarization

We build a heterogenous graph containing both the users and their claims on social network, and use Graph Variational Autoencoders to analyze their polarization property towards a social topic.

Machine Learning Group, Purdue University

Visiting Undergraduate Research Intern

Sep - Dec 2018

- Advisor: Prof. Yexiang Xue
- Transform Scribbles to Oil Paintings with Multi-Task GANs

We introduced *Multi-Task Learning* to the settings of *Generative Adversarial Networks* to address the sparsity problem of scribbles when transforming them into artistic oil paintings. (IJCAI 2019 Published)

Counterfactual Machine Learning Group, Cornell University

Visiting Undergraduate Research Intern

Jul - Aug 2018

- Advisor: Prof. Thorsten Joachims
- Improve Supervised Learning on Logged Bandit Feedbacks
 Straightforward supervised learning often leads to large bias. We improved supervised methods by applying *inverse propensity weighting* to balance the bias-variance tradeoff.
- A Hybrid Method of Counterfactual Risk Minimization and Supervised Learning. Designed a hybrid loss function not only learns the feedback of logged action, but also minimizes counterfactual risk for all the candidates in a batch.
- Ad Placement Challenge on Criteo Dataset
 Implemented our methods to learn an ad placement policy. Our method achieved Rank
 1 in NIPS 2017 Workshop: Criteo Ad Placement Challenge (post-challenge).

Data Mining Group, Advanced Network Lab, Shanghai Jiao Tong University

Research Assistant Jul 2017 - Jun 2019

- Advisor: Prof. Xiaofeng Gao
- Cross-Platform Event Popularity Analysis.

Developed a scheme to quantify event popularity and analyzed the mechanisms through which an event propagates among multiple social media. (DEXA 2018 Published)

- Sentiment-Aware Topic Popularity Prediction on Short Text based Social Media.

Developed a novel neural network to estimate public sentiment and integrated it with time series analysis to improve popularity prediction. (ICDM 2019 Accepted)

Industry Experience

Automatic Driving Perception, Pony.ai Inc. Algorithm Engineer Jul 2019 - Aug 2020

- Fused Road Obstacle Classification.

Develop obstacle classification system to recognize cars, pedestrian, cyclists, etc with videos and 3D point cloud, helping automatic driving car recognize the environment.

- Trajectory Prediction.

Develop algorithm to predict the trajectory of one object with historical information.

Computer Vision Team, YITU Tech Inc. Research Intern

Feb - Jun 2019

- Improve Face Recognition with Super-Resolution Algorithm.

Develop a super-resolution algorithm to restore low-resolution facial images while preserving the identification, and therefore improve the face recognition task.

| Honors | Zhiyuan Scholarship for Overseas Visiting Study (First Prize). | 2019 |
|------------------------|---|--------------|
| and Awards | Han-Ying-Ju-Hua Scholarship. | 2018 |
| | Academic Excellence Scholarship of SJTU (First Prize). (Top 5%) | 2017 |
| | International Interdisciplinary Contest in Modeling (Meritorious Winner). (| Top 7%) 2017 |
| | Zhiyuan Honorary Scholarship. | 2016, 2017 |
| | International Mathematical Contest in Modeling (Outstanding Winner). (7 | Top 1%) 2015 |
| | Dongrun-Yau International High School Science Award. (Top 1%) | 2015 |
| Teaching Experience | Teaching Assistant at MS100: Operating System | Spring 2018 |
| | Teaching Assistant at CS122: Programming | Fall 2016 |
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Programming C/C++, Java, Python (TensorFlow, PyTorch, MXNet)
Proficiencies HTML & Javascript (D3.js), Matlab, ŁTŁX, Verilog HDL