Dong Wang

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Present Duke University

Postdoctoral Researcher, Advisor: Lawrence Carin, 09/2017 – Present.

Education Tsinghua University

Ph.D., Computer Science, Advisor: Jian Li, 08/2012 – 07/2017.

China University of Mining and Technology

B.E., Computer Science, 08/2008 - 07/2012.

Awards and Fellowships

Competitions

- No.3 among 1956 teams, Travel Time Estimation Competition

(DataCastle 2017, http://www.pkbigdata.com/)

- No.2 among 1648 teams, Supply-demand Prediction Competition for Online

Car-hailing Service (Di-tech Algorithm Competition, 2016)

- The Most Potential Prize, Di-tech Algorithm Competition, 2016

- Winning prize, National Information Security Competition, 2010

- The second prize, Subei Math Model Competition, 2010

Scholarship

- The third prize scholarship, Tsinghua University, 2012-2013

- The social work scholarship, Tsinghua University, 2012-2013

- The first prize scholarship, China University of Mining and Technology, for three times, 2009 - 2012

Research Experience

Information Initiative at Duke (iiD) 09/2017 - Present

Postdoctoral Researcher, Advisor: Prof. Lawrence Carin

- i) Developing deep generative models for computer vision, including generative adversarial networks and variational autoencoders
- ii) Developing deep learning models for spatio-temporal data.

IIIS at Tsinghua University 08/2012 - 07/2017

Research Assistant. Advisor: Prof. Jian Li

Machine learning and deep learning algorithms, and their application in massive spatio-temporal traffic data

Didi Chuxing, Research Lab 9/2016 – 01/2016

Algorithm Design Intern, Advisor: Prof. Jieping Ye

Supply-demand prediction of online car-hailing

- Feature engineering of the model v1 (based on GBDT)
- Design and develop the deep learning based model

Teaching Experience Mathematics for Computer Science 2015 Fall

Teaching Assistant with Prof. John Steinberg

Comprehensive Paper Training Fall 2014

Teaching Assistant with Prof. Jian Li

Research Interests

Machine learning, deep learning algorithms and their applications in massive spatio-temporal data.

Skills

Machine Learning, Deep Learning (Keras, Tensorflow, Pytorch); Python

Publications

- When Will You Arrive? Estimating Travel Time Based on Recurrent Neural Networks, Dong Wang, Junbo Zhang, Wei Cao, Jian Li, Yu Zheng. In Association for the Advancement of Artificial Intelligence (AAAI) 2018.
- DeepSD: Supply-Demand Prediction for Online Car-hailing Services using Deep Neural Networks, Dong Wang, Wei Cao, Jian Li, Jieping Ye. In International Conference on Data Engineering (ICDE) 2017.
- Forecasting Delivery Amount with Attention based Model, Dong Wang, Yaowu Zhang, Benyu Wang, Jing Jin, Jian Li. The Institute for Operations Research and the Management Sciences (INFORMS) 2017 (Poster).
- ETCPS: An Effective and Scalable Traffic Condition Prediction System, Dong Wang, Wei Cao, Mengwen Xu, Jian Li. In Database Systems for Advanced Applications (DASFAA) 2016.
- Automatic User Identification across Heterogeneous Data Sources, Wei Cao Zhengwei Wu, Dong Wang, Jian Li, Haishan Wu. In International Conference on Data Engineering (ICDE) 2016.
- DESTPRE: A Data-Driven Approach to Destination Prediction, Mengwen Xu, Dong Wang, Jian Li. In ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp) 2016.
- Learning and Prediction over Massive Spatio-temporal Traffic Data, Dong Wang. (PhD dissertation)