Dong Wang

📱 +1 (919) 884 1812 • ✉ dong.wang363@duke.edu

Currently

Duke University	**2017–2019**
Postdoctoral Researcher	*Durham, U.S.*

Education

Tsinghua University	**2012–2017**
Ph.D., Computer Science	*Beijing, China*
China University of Mining and Technology	**2008–2012**
B.E., Computer Science, GPA 3.87/4.0, Rank:1/76	*Xuzhou, China*

Research Interests

Video generation and prediction; application of machine learning and deep learning on medical data and spatio-temporal data (traffic, online car-hailing).

Research Experience

Information Initiative at Duke University (iiD) — **Durham, NC**
Postdoctoral Researcher, with Prof. Lawrence Carin. — *2017.9–Present*
- Research project on the general framework for video and key frame generation/prediction.
- Research project on missing value imputation in time series data
- Alzheimer disease prediction with ophthalmology images.

Microsoft Research Asian — **Beijing**
Visiting Scholar, with Prof. Yu Zheng — *2017.6–2017.9*
- DeepTTE: Travel time estimation for given path. Proposed a Geo-Conv layer to represent time series data in geographical space in deep learning based prediction model.

Research Lab at Didi Chuxing — **Beijing**
Algorithm Design Intern, with Prof. Jieping Ye — *2016.9–2017.1*
- Supply-demand prediction of online car-hailing. Designed a deep learning based prediction model for extremely skewed data prediction

IIIS at Tsinghua University — **Beijing**
Research Assistant, with Prof. Jian Li — *2012.8–2017.7*
- Learning and prediction over massive spatio-temporal traffic data.

Awards and Fellowships

Competitions..
- No.3 among 1956 teams, DataCastle 2017, Travel Time Estimation Competition
- No.2 among 1648 teams, Di-tech Algorithm Competition, 2016, Supply-demand Prediction

Competition for Online Car-hailing Service
- The Most Potential Prize, Di-tech Algorithm Competition, 2016

Scholarship..

- The second prize scholarship, Tsinghua University, 2014-2015
- The social work scholarship, Tsinghua University, 2012-2013
- The first prize scholarship, China University of Mining and Technology, for three times, 2009 - 2012

Experience

Mathematics for Computer Science   **Tsinghu University**
Teaching assistant, with Professor John Steinberg   *2015 Fall*

Comprehensive Paper Training   **Tsinghu University**
Teaching assistant, with Professor Jian Li   *2014 Fall*

Software Skills

Python (Pytorch, TensorFlow), Jave, C++

Publications

- Conditional Video Generation with Leaked future guider Information, **Dong Wang**, Yitong Li, Lawrence Carin.
- LMVP: Video Predictor with Leaked Motion Information, **Dong Wang**, Yitong Li, Qi Wei, Wei Cao, Liqun Chen. (NIPS) 2018 (Workshop).
- BRITS: Bidirectional Recurrent Imputation for Time Series, Wei Cao, **Dong Wang**, Jian Li, Hao Zhou, Lei Li, Yitan Li. (NIPS) 2018.
- 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. (Oral)
- 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. (Oral)
- Automatic User Identiffication across Heterogeneous Data Sources, Wei Cao Zhengwei Wu, **Dong Wang**, Jian Li, Haishan Wu. In International Conference on Data Engineering (ICDE) 2016. (Oral)
- 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. (Oral)
- Learning and Prediction over Massive Spatio-temporal Traffic Data, **Dong Wang**. (PhD dissertation)