Xintong Wang

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EDUCATION

South China University of Technology	**School of Computer Science and Engineering**	**Master of Engineering**
	Computer Science	09.2016-06.2019
South China University of Technology	**School of Computer Science and Engineering**	**Bachelor of Engineering**
GPA: 3.4/4	Computer Science & Technology	09.2012-06.2016

RESEARCH INTERESTS

- Machine Learning, Deep Learning, Computer Vision, Natural Language Processing
- Distributed Storage and Computing System

PUBLICATIONS

- **Xintong Wang**, Jianming Lv. Cross-dataset Person Re-Identification Using Similarity Preserved Generative Adversarial Networks. KSEM-18: International Conference on Knowledge Science, Engineering and Management. 2018
- Jianming Lv, Qing Li, **Xintong Wang**. T-CONV: A Convolutional Neural Network For Multi-scale Taxi Trajectory Prediction. BigComp-18: IEEE International Conference on Big Data and Smart Computing. 2018
- HaitaoYang, Jianming Lv, Fei Xu, **Xintong Wang**, Yilin Huang, Lanting Xia, and Xuewu Zhu. Regression Approach for Optimal Purchase of Hosts Cluster in Fixed Fund for Hadoop Big-data Platform. 19th International Conference on Smart City, Transportation and Buildings. 2017
- Jianming Lv, **Xintong Wang**, Fengtao Huang, Junjie Yang. TREST: A Hadoop Based Distributed Mobile Trajectory Retrieval System. DSC-16: IEEE International Conference on Data Science in Cyberspace. 2016
- Haibiao Lin, Jianming Lv, Can Yang, Miaoyi Deng, Kaitao Wang, **Xintong Wang**. GPS Trajectory Mining : a Survey. In Journal of Computational Information Systems: Vol. 10 (16). 2014

RESEARCH EXPERIENCE

Generative Adversarial Network for Abstractive Text Summarization SIAT@CAS

Supervised by Prof. Min Yang, Chinese Academy of Sciences *March 2018 - Now*

- Proposed an adversarial process for abstractive text summarization, in which we simultaneously trained a generative model G (as an agent of reinforcement learning, which takes raw text as input and predicts the abstractive summarization) and a discriminative model D which attempts to distinguish the generated summary from the ground truth summary.
- Extensive experiments on CNN and Daily Mail dataset showed that our model was able to generate more abstractive, readable and diverse summaries.

Cross-dataset Person Re-Identification Using Similarity Preserved Generative Adversarial Networks. Intelligent Information Fusion Lab@SCUT

Supervised by Prof. Jianming Lv, South China University of Technology *Sep. 2017 - Jan. 2018*

- Due to the high cost of data labeling, most proposed Re-ID algorithms conduct supervised learning on small-labeled datasets. Directly deploying these trained models to real-world large-scale camera networks may lead to poor performance. We address this cross-dataset Re-ID challenge by transforming unlabeled images in the target domain to fit the classifier using our proposed similarity preserved generative adversarial networks model.
- Comprehensive experiments based on real datasets indicated that our model performed better than state-of-the-art cross-dataset unsupervised transfer learning algorithms.

Paper has been accepted by **KSEM**, Full paper. Acceptance rate of 23%.

A Convolutional Neural Network For Multi-scale Taxi Trajectory Prediction. Intelligent Information Fusion Lab@SCUT

Supervised by Prof. Jianming Lv, South China University of Technology *Sep. 2016 - Sep. 2017*

- Proposed T-CONV which models trajectories as two-dimensional images, and adopts multi-layer convolutional neural networks to combine multi-scale trajectory patterns to achieve precise prediction. Furthermore, we integrate multiple local enhancement convolutional fields to explore these critical areas deeply for better prediction.
- Comprehensive experiments based on real trajectory data showed that T-CONV can achieve higher accuracy than state-of-the-art methods.
- Paper has been accepted by BigComp, Full paper.

Hadoop Based Distributed Mobile Trajectory Retrieval System. New Media Lab@SCUT

Supervised by Prof. Jianming Lv, South China University of Technology *Sep. 2015 - Sep. 2016*

- Developed a mobile trajectory retrieval system named TREST, based on distributed Hadoop and HBase systems. TREST makes use of the horizontal expansion mechanism of Hadoop to store overwhelming spatio-temporal trajectories, and supports frequent incremental insertion of data stream. Meanwhile, TREST maps the spatio-temporal features of trajectories into simple key-value schema of HBase to support fast retrieval.
- Experiments on this data set showed that TREST can efficiently support both Single-track and All-track retrieval within milliseconds.
- Paper has been accepted by DSC, Full paper.

SCHOLARSHIPS / AWARDS

- First Prize of Academic Scholarships of South China University of Technology 2017-2018
- First Prize of Academic Scholarships of South China University of Technology 2016-2017
- Tencent Scholarship of the Science and Technology (1%) 2015-2016
- Anju Bao Scholarship of the Science and Technology (1%) 2014-2015
- Merit Student of the Campus, Second-grade Excellent Study Scholarship 2013-2014
- Honorable Mention of Mathematical Contest In Modeling Certificate of Achievement 2015
- Gold Prize in National COMAP's Computer Software Design Contest. 2015

PROGRAMMING SKILLS

- Computer Language: Python, C++, Java
- Develompment Software: Pycharm, Eclipse, Ipython notebook
- Database Software: MySQL, Oracle, HBase, Hive
- Toolkit for Data Analysis: Numpy, Pandas, Matplotlib, Seaborn, NLTK, Sklearn
- Framework for Deep Learning: Pytorch, Tensorflow, Keras, MXNet
- Framework for Distributed Computing: Hadoop, Spark
- Editing Software: Word, Excel, PowerPoint, Latex