# Jianpeng Xu<sup>1</sup>

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#### **EDUCATION**

Ph.d Candidate, Computer Science and Engineering, Michigan State University (MSU)

Fall 2011 - Now **Advisor**: Pang-Ning Tan

M.S Degree, Computer Science, Harbin Institute of Technology (HIT), China

Fall 2007 - Spring 2010

B.S Degree, Computer Science, Shandong University (SDU), China

Fall 2003 - Spring 2007

### **EXPERIENCE**

Research Assistant MSU Fall 2013-Present

East Lansing, MI

Geospatio-temporal Data Mining, Multi-task Learning/Personalized medical modeling. (Techniques

include matrix factorization, regression, online learning, etc.)

Intern Data Scientist Samsung Research America Spring, Summer 2015

San Jose, CA

Design recommender system algorithms for Samsung Smart TV. Build TV Ads system, especially for the large-scale data streaming and database support. (Techniques include Hadoop, Spark, Pig, Java, Scala, Python, bash, etc.)

Intern Data Scientist Samsung Research America Summer 2014

San Jose, CA

Analysis on user behavior and user demographics using smart TV watching history.

Teaching Assistant MSU Spring 2013

East Lansing, MI

Teaching Assistant for the course Computational Techniques for Large-Scale Data Analysis (CSE491/891), covering techniques including Hadoop, Pig, Hive, Mahout, as well as AWS.

Intern Software Engineer Narus Inc Summers 2012

Sunnyvale, CA

Develop methods to detect malicious endpoints using data mining techniques, including label propagation.

Research Assistant MSU Fall 2011-Fall 2012

East Lansing, MI

Land cover and land use change detection using MODIS data.

## SELECTED PUBLICATIONS

- Jianpeng Xu, Jiayu Zhou, Pang-Ning Tan, Xi Liu, Lifeng Luo. WISDOM: Weighted Incremental Spatio-Temporal Multi-Task Learning via Tensor Decomposition. IEEE BigData 2016
- Jianpeng Xu, Pang-Ning Tan, Jiayu Zhou, Lifeng Luo. Online Multi-task Learning Framework for Ensemble Forecasting. Submitted to TKDE
- Kaixiang Lin, Jianpeng Xu, Shuiwang Ji, Jiayu Zhou. Multi-Task Feature Interaction Learning. KDD 2016
- Jianpeng Xu, Kaixiang Lin, Pang-Ning Tan and Jiayu Zhou. Synergies that Matter: Efficient Interaction Selection via Sparse Factorization Machine. SDM 2016

<sup>&</sup>lt;sup>1</sup>CV udpated on October 12, 2016.

- Jianpeng Xu, Pang-Ning Tan, Lifeng Luo and Jiayu Zhou. GSpartan: a Geospatio-Temporal Multi-task Learning Framework for Multi-location Prediction. SDM 2016
- Jianpeng Xu, Jiayu Zhou and Pang-Ning Tan. Formula: FactORized MUlti-task LeArning for task discovery in personalized medical models. SDM 2015
- Jianpeng Xu, Pang-Ning Tan and Lifeng Luo. ORION: Online Regularized multI-task regressiON and its application to ensemble forecasting. ICDM 2014
- Jianpeng Xu and Shufan Ji. HDminer: Efficient Mining of High Dimensional Frequent Closed Patterns from Dense Data and Its Application. ICDM 2014 workshop on Scalable Data Analytics: Theory and Applications
- Lei Liu, Sabyasachi Saha, Ruben Torres, Jianpeng Xu, Pang-Ning Tan, Antonio Nucci, Marco Mellia, Detecting Malicious Clients in ISP Networks Using HTTP Connectivity Graph and Flow Information, ASONAM 2014

#### **PATENT**

 Sabyasachi Saha, Lei Liu, Ruben Torres, Jianpeng Xu, Antonio Nucci, Detecting Malicious Endpoints Using Network Connectivity and Flow Information, US8813236 B1, Aug 19, 2014

#### HONORS AND AWARDS

Best Poster Award from Doctoral Forum, SDM 2016 Student Travel Award from SDM 2016, SDM 2015, ICDM 2014 Student Travel Award, MSU Graduate School, 2014 Graduate Assistant Support from Michigan State University, Fall 2011-Present Honorable mentioned in Mathematical Contest in Modeling (MCM), 2006

#### **SERVICES**

- PC Member for MLRec2016, BIBM2015, IJCAI2015, MLRec2015(in conjunction with SD-M2015)
- Conference External Reviewer for IJCAI2016, AAAI2016, SDM2016, SDM2015, WSD-M2015, DSAA2015, CIKM2014, DSAA2014, ICDM2014
- Invited Journal Reviewer for Neurocomputing, BMC Bioinformatics, TNNLS

#### MACHINE LEARNING SKILLS

Liner regression, Logistic regression, SVM, PCA, SVD, Matrix factorization, Tensor decomposition, Online learning, (stochastic) Gradient descent, Probabilistic modeling, Gaussian process, Clustering, etc.

### PROGRAMMING SKILLS

Software Developments: C/C++, Java, C#, Python, Matlab, SQL Web Developments: Perl, PHP, AJAX, Javascript, HTML, XML Big Data Analysis: Hadoop, Hive, Pig, Mahout, Spark

### REFERENCESAREAVAILABLE UPON REQUEST