

# Chunqiu Zeng

## Resume

11200 SW 8th. Street

Miami, 33199, FL

☎ 786-527-0301

✉ grandzeng@gmail.com

Homepage: <http://users.cis.fiu.edu/~czeng001>,

GitHub: <https://github.com/grandzeng>

## Research Interests

Large Scale Data Mining; Temporal Data Mining; Recommender System; Advertising; Distributed Data Mining; Data Analysis

## Education

- 2012-Now **Ph.D. in Computer Science**, *Florida International University*, Miami, FL, USA.  
**GPA: 3.9.** Research Area: Large-scale Data Mining, Event Mining, Distributed Data Mining
- 2006-2009 **M.S. in Computer Science**, *Sichuan University*, Chengdu, Sichuan, China.  
GPA: 3.6. Research Area: Data Mining
- 2002-2006 **B.S. in Computer Science**, *Sichuan University*, Chengdu, Sichuan, China.  
GPA: 3.4

## Experience

### Industry Experience

- Summer of 2015 **Intern, DoubleClick Search Reporting Team, Google**, Kirkland , WA, USA.  
Leveraged some data mining and statistics techniques to conduct change impact analysis, with the purpose to identify the correlation between advertising changes and performance metrics. Constructed a flume pipeline for change impact analysis over large scale data.
- Summer of 2014 **Intern, VideoAds Format Team, Google**, Mountain View , CA, USA.  
Built a tool to integrate multi-sources Ads time series data on YouTube video. Developed an integrated interface to facilitate the users for Ads time series data querying, analysis and visualization. Explored the correlation between time series to identify the factors in Ads format which contributes to skipping rate of Ads.
- Summer of 2013 **Intern, IBM T.J Watson Research Center**, New York, NY, USA.  
Facilitated problem diagnosis, determination and auto-resolution in a complex IT environment by designing and implementing a hierarchical multi-label classifier to analyze the incident tickets data of IBM Tivoli Monitoring System.

2009.7.1-2012.1.1 **Senior Data Engineer**, *Data Warehouse Department*, **Alibaba Group**, Hangzhou, China.

- Designed and implemented the meta-data extraction and association rule mining algorithms for the *Metadata Mining System*, a system that leverages data mining techniques to discover the latent relationship of 10000+ database tables from the heterogeneous sources such as DB2, Oracle, Greenplum, etc.
- Designed and implemented the scheduling algorithm for the internal data analysis job scheduling system. The implemented algorithm is able to schedule 10000+ ETL jobs per day on top of a heterogeneous architecture consisting of DB2, RAC, Greenplum, Hadoop/Hive, etc.
- Designed and implemented a distributed system called *Data Highway* to facilitate the high-speed data transmission between the heterogeneous data sources including DB2, HDFS, SQLServer, MySQL, Greenplum, RAC.
- Designed and implemented the *Automatic Deployment System* that is able to automatically deploy hundreds of projects per day.

2007.8-2008.3 **Software Engineer Intern**, *MSGUI Group*, **Alcatel-Lucent**, Chengdu, China.

- Designed the conceptual, logical, and physical data model and implemented the data access interface for a network management system called MAPIM.
- Implemented the configuration module for a user graphic rendering service called GUI Server and the communication module between the GUI Server and the MAPIM.

## Academic Experience

2012.1-Present **Research Assistant**, *Knowledge Discovery Research Group*, FIU, USA.

- Designed and implemented a Fast,Integrated,User-friendly system named FIU-Miner in support of running a number of data analysis tasks in distributed environment. FIU-Miner, a linearly extensible system, provides a user-friendly workflow to schedule data analysis tasks in full use of the available resources of distributed environment.[**online demo**]
- Leded the design and implementation of manufacturing data analysis platform. This platform provides an integrated suit of solutions to analyze manufacturing data, especially the product data of Plasma Display Panel. The platform shows the entire solution of the data analysis from the initial data exploration to the final knowledge extraction.  
[**online demo**]

## Programming Skills

Languages: Java (proficient), Python (familiar), Javascript (familiar), C/C++ (familiar)  
DB: Oracle, DB2, MySQL, MongoDB, PostgreSQL, HDFS, Hive, Big Table

Frameworks & Libraries: Apache Hadoop, Flume, Thrift, Protocol Buffer, Stubby, Mahout, jQuery  
Tools: Git, SVN, make,

## Book Chapter

1. Event Mining: Algorithms and Applications. Released by Chapman and Hall/CRC, September 2015. Chunqiu Zeng contributes to Chapter 4 (Pattern Discovery and Summarization Event Pattern Mining ) and Chapter 5 (Mining Time Lags).
2. Maximizing Management Performance and Quality with Service Analytics. Released by IGI Global, August 2015. Chunqiu Zeng contributes to Chapter 7 (Tuning up IT Services using Monitoring Configuration Analytics).
3. Data Mining Where Theory Meets Practice. Released by Xiamen University Press, 2013, ISBN 9787561542941. Chunqiu Zeng contributes to Chapter 13 (Data Mining Application in Advanced Manufacturing).

## Selected Publications

1. Tao Li, **Chunqiu Zeng**, Li Zheng, Lei Li, Yue Huang, Zheng Liu, Qifeng Zhou, Wubai Zhou, and Wei Xue, "FIU-Miner (A Fast, Integrated, and User-Friendly System for Data Mining) and Its Applications", in Knowledge and Information Systems (KAIS), 2016.
2. Tao Li, Ning Xie, **Chunqiu Zeng**, Wubai Zhou, Li Zheng, Yexi Jiang, Yimin Yang, Hsin-Yu Ha, Wei Xue, Chao Shen, Liang Tang, Lei Li, Shu-ching Chen, Jai Navlakha, and S.S. Iyengar, "Data-driven Techniques in Disaster Information Management", in ACM Computing Surveys, 2016.
3. **Chunqiu Zeng**, Qing Wang, Wentao Wang, Tao Li, Larisa Shwartz, "Online Inference for Time-Varying Temporal Dependency Discovery from Time Series", in Proceedings of the 4th annual IEEE International Conference on Big Data (IEEE Big Data), 2016.
4. **Chunqiu Zeng**, Liang Tang, Wubai Zhou, Tao Li, Larisa Shwartz, Genady Ya. Grabarnik, "An Integrated Framework for Mining Temporal Logs from Fluctuating Events", in IEEE Transactions on Services Computing (TSC), 2016.
5. Tao Li, Wubai Zhou, **Chunqiu Zeng**, Qing Wang, Qifeng Zhou, Dingding Wang, Jia Xu, Yue Huang, Wentao Wang, Mingjing Zhang, Steve Luis, Shu-Ching Chen, Naphtali Rishe, "DI-DAP: An Efficient Disaster Information Delivery and Analysis Platform in Disaster Management", in Proceedings of the 25th ACM Conference on Information and Knowledge Management (CIKM 2016), Indianapolis, US, Oct. 2016.
6. Wubai Zhou, Liang Tang, **Chunqiu Zeng**, Tao Li, Larisa Shwartz, Genady Ya. Grabarnik, "Resolution Recommendation for Event Tickets in Service Management", in IEEE Transactions on Network and Service Management (TNSM), 2016.
7. **Chunqiu Zeng**, Qing Wang, Shekoofeh Mokhtari, Tao Li, "Online Context-Aware Recommendation with Time Varying Multi-Armed Bandit", in Proceedings of the 22nd annual ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD 2016), San Francisco, USA, 2016.
8. Jian Xu, Yexi Jiang, **Chunqiu Zeng**, Tao Li, "Node Anomaly Detection for Homogeneous Dis-

tributed Environments", Expert Systems with Applications (ESWA 2015).

9. Liang Tang, Yexi Jiang, Lei Li, **Chunqiu Zeng**, Tao Li. "Personalized Recommendation via Parameter-Free Contextual Bandits", in Proceedings of the 38th Annual International ACM SIGIR Conference (SIGIR 2015), Santiago de Chile., Aug. 9-13, 2015.
10. **Chunqiu Zeng**, Liang Tang, Tao Li, Larisa Shwartz, Genady Ya. Graharnik. "Mining Temporal Lag from Fluctuating Events for Correlation and Root Cause Analysis", The 10th International Conference on Network and Service Management (CNSM 2014).
11. **Chunqiu Zeng**, Hongtai Li, Huibo Wang, Yudong Guang, Chang Liu, Tao Li, Mingjin Zhang, Shu-Ching Chen, Naphtali Rishe. "Optimizing Online Spatial Data Analysis with Sequential Query Patterns", The 15th IEEE international Conference on Information Integration and Reuse (IRI 2014).
12. Yexi Jiang, **Chunqiu Zeng**, Jian Xu, Tao Li. "Real time contextual collective anomaly detection over multiple data streams", ACM SIGKDD Workshop Outlier Detection & Description under Data Diversity (SIGKDD Workshop ODD<sup>A2</sup>), 2014.
13. Li Zheng, **Chunqiu Zeng**, Lei Li, Yexi Jiang, Wei Xue, Jingxuan Li, Chao Shen, Wubai Zhou, Hongtai Li, Liang Tang, Tao Li, Bing Duan, Ming Lei, and Pengnian Wang. "Applying Data Mining Techniques to Address Critical Process Optimization Needs in Advanced Manufacturing", in Proceedings of the 20th ACM Conference on Knowledge Discovery and Data Mining (KDD 2014), New York, USA, Aug. 2014.
14. Lei Li, Chao Shen, Long Wang, Li Zheng, Yexi Jiang, Liang Tang, Hongtai Li, Longhui Zhang, **Chunqiu Zeng**, Tao Li. "iMiner: Mining Inventory Data for Intelligent Management.", in Proceedings of the 23rd ACM Conference on Information and Knowledge Management (CIKM 2014), Shanghai, China, Nov. 2014
15. **Chunqiu Zeng**, Tao Li, Larisa Shwartz, Genady Ya. Graharnik. "Hierarchical Multi-Label Classification over Ticket Data using Contextual Loss." in Proceedings of IEEE/IFIP Network Operations and Management Symposium (NOMS'2014), 2014.
16. **Chunqiu Zeng**, Yexi Jiang, Li Zheng, Jingxuan Li, Lei Li, Hongtai Li, Chao Shen, Wubai Zhou, Tao Li, Bing Duan, Ming Lei, Pengnian Wang. "FIU-Miner: A Fast, Integrated, and User-Friendly System for Data Mining in Distributed Environment." ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2013.
17. Li Zheng, Chao Shen, Liang Tang, **Chunqiu Zeng**, Tao Li, Steve Luis, Shu-Ching Chen. "Data Mining Meets the Needs of Disaster Information Management." In IEEE Transactions on Human-Machine Systems, 2013.
18. Li Zheng, Chao Shen, Liang Tang, **Chunqiu Zeng**, Tao Li, Steve Luis, Shu-Ching Chen and Jainendra K. Navlakha. "Disaster SitRep - A Vertical Search Engine and Information Analysis Tool in Disaster Management Domain." The 13th IEEE International Conference on Information Integration and Reuse (IRI), pp.457 - 465, 2012.
19. **Chunqiu Zeng**, Jie Zuo, Chuan Li, Kaikuo Xu, Shengqiao Ni, Liang Tang, Yue Zhang, Shaojie

Qiao. "MPSQAR: Mining Quantitative Association Rules Preserving Semantics", in Proceedings of the International Conference on Advanced Data Mining and Applications (ADMA), pp. 572 - 580, 2008

## Professional Services

### **Journal Paper Reviewer.**

- IEEE Transactions on Knowledge and Data Engineering(TKDE)
- ACM Transactions on Knowledge Discovery from Data(TKDD)
- Knowledge and Information Systems (KAIS)
- IEEE Transactions on Human-Machine Systems (THMS)

### **Conference Paper Reviewer.**

- IJCAI-16
- KDD 2015 (21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining)
- IEEE BigData 2015
- ICSC 2015
- RecSys 2015, RecSys 2016
- SIAM International Conference on Data Mining 2015 (SDM 2015)
- International conference on Service Computing 2015 (SCC 2015)
- IEEE International Conference on Data Mining 2013 (ICDM 2013)

### **Program Committee Member.**

- The 1st International Conference on Software Networking,2016 (ICSN2016)
- The 22nd ACM SIGKDD Conference on Knowledge Discovery and Data Mining, 2016 (KDD 2016)
- 2016 International Conference on Advanced Electronic Science and Technology (AEST2016)
- The 2nd International Conference on Fuzzy Systems and Data Mining (FSDM 2016)

## Awards

- 2016 Dissertation Year Fellowship at FIU.
- 2016 KDD Rising Star (Rank 6), Microsoft Academic Search, 2016 (<http://www.bing.com/academic/kdd2016risingstars>)
- 08/2016 ACM SIGKDD 2016 Student Travel Award, 2016.
- 05/2016 SDM 2016 Student Travel Award, 2016.
- 12/2014 The Best Graduate Student Research Award in the School of Computing and Information Sciences (SCIS) at FIU for Year 2013-2014.
- 12/2006 The 2nd National Open Source Software Competition (China), Award finalists

- 06/2006 Amway College Student's computer works competition, Second class award
- 2004 Second Prize in Sichuan Contest District for National Undergraduate Mathematical Contest in Modeling