

# XIAO QIN

Homepage: <http://web.cs.wpi.edu/~xqin>

Office: Fuller Laboratories 319, 100 Institute Road, Worcester, MA 01609

Email: [xqin@cs.wpi.edu](mailto:xqin@cs.wpi.edu)

## RESEARCH INTEREST

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My broad research interests include data mining, big data analytics and information management.

## EDUCATION

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- Ph.D. Candidate**, Computer Science 2013 – Present  
*Worcester Polytechnic Institute*, Worcester, MA, USA.  
Advisor: Dr. Elke A. Rundensteiner
- Master of Science**, Information Sciences 2011  
*University of Pittsburgh*, Pittsburgh, PA, USA.  
Concentration: Information Retrieval/Online Question & Answering Systems.
- Bachelor of Engineer**, Computer Science & Technology 2009  
*Harbin Institute of Technology*, Harbin, Heilongjiang, China.  
Thesis: "A Rule-based, Statistical Model for Chinese Archeology Term Extraction."

## PUBLICATION

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- Susmitha Wunnava, **Xiao Qin**, Tabassum Kakar and Elke Rundensteiner. *One Size Does Not Fit All: An Ensemble Approach Towards Information Extraction from Adverse Drug Event Narratives*. **HEALTHINF** '18.
- Xiao Qin**, Tabassum Kakar, Susmitha Wunnava, Elke Rundensteiner and Lei Cao. *MARAS: Signaling Multi-Drug Adverse Reactions*. **KDD** '17, 1615-1623.
- Susmitha Wunnava, **Xiao Qin**, Tabassum Kakar, Vimig Socrates, Amber Wallace and Elke Rundensteiner. *Towards Transforming FDA Adverse Event Narratives into Actionable Structured Data for Improved Pharmacovigilance*. **SAC** '17, 777-782.
- Xiao Qin**, Ramoza Ahsan, Xika Lin, Elke Rundensteiner, and Matthew Ward. *Interactive Temporal Association Analytics*. **EDBT** '16, 197-208.
- Xiao Qin**, Zhongqiang Chen, Yuan Zhang and Shenhong Zhu. *Death Hoax Detection in Query Suggestions*. **Yahoo! Tech Pulse** '15.
- Xiao Qin**, Ramoza Ahsan, Xika Lin, Elke Rundensteiner, and Matthew Ward. *iPARAS: Incremental Construction of Parameter Space for Online Association Mining*. **BigMine** '14, JMLR 36 :149-165.
- Amin Teymorian, **Xiao Qin**, and Ophir Frieder. *RESQ: Rank-Energy Selective Query Forwarding for Distributed Search Systems*. **CIKM** '12, 2579-2582.
- Dongping Gao, Zhendong Niu, Lening Lv, Peng Jiang, **Xiao Qin**, and Jiahong Guo. *Chinese Unknown Word Recognition Based on Functional Applications of Type Theory*. **IITA** '08, 3 :498-502.

## TALK/POSTER

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- *Density-based Outlier Detection over Data Stream*. Graduate Research Innovation Exchange (GRIE). WPI, Worcester, MA. Apr 11, 2017.
- *Text Mining From Drug Surveillance Report Narratives*. The 5th Annual Community Engagement and Research Symposium. Umass Medical School, Worcester, MA. March 25, 2016.
- *Towards Pharmacovigilance Using Machine Learning To Identify Unknown Adverse Reactions Triggered By Drug-Drug Interaction*. The 5th Annual Community Engagement and Research Symposium. Umass Medical School, Worcester, MA. March 25, 2016.

- *Interactive Temporal Association Analytics*. Graduate Research Innovation Exchange (GRIE). WPI, Worcester, MA. Apr 11, 2016.
- *EPSTAR: An Evolving Parameter Space Framework for Interactive Temporal Association Rule Mining*. New England Database Summit (NEDB). MIT, Cambridge, MA. Jan 30, 2015.
- *Evolving Parameter Space Framework for Interactive Temporal Association Mining*. Graduate Research Innovation Exchange (GRIE). WPI, Worcester, MA. Dec 10, 2014.
- *IncPARAS: An Incremental Parameter Space Load Pipeline for Interactive Association Mining*. Graduate Research Innovation Exchange (GRIE). WPI, Worcester, MA. Mar 19, 2014.
- *IncPARAS: An Incremental Parameter Space Load Pipeline for Interactive Association Mining*. New England Database Summit (NEDB). MIT, Cambridge, MA. Jan 31, 2014.

## EMPLOYMENT

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| <p><b>Worcester Polytechnic Institute</b><br/><i>Teaching Assistant</i></p> <ul style="list-style-type: none"> <li>- CS 2223: Algorithms</li> <li>- CS 4432: Database Systems II</li> <li>- CS 542: Database Management Systems</li> </ul>   | <p>8/2015 – 5/2016<br/>Worcester, MA</p>   |
| <p><b>Yahoo! Search</b><br/><i>Technical Intern III</i></p> <ul style="list-style-type: none"> <li>- <i>Search Assist Team</i>, Manager : Shenhong Zhu, Mentor: Dr. Zhongqiang Chen</li> <li>- Developed data mining algorithms and pipelines for filtering query suggestions with controlled contents.</li> </ul> | <p>5/2015 – 8/2015<br/>Sunnyvale, CA</p>   |
| <p><b>Worcester Polytechnic Institute</b><br/><i>Research Assistant</i></p> <ul style="list-style-type: none"> <li>- <i>Database System Research Group (DSRG)</i><br/>Supervisor: Dr. Elke A. Rundensteiner</li> <li>- <i>Data Visualization Lab (Xmdv)</i><br/>Supervisor: Dr. Matthew O. Ward</li> </ul>         | <p>8/2013 – 5/2015<br/>Worcester, MA</p> <p><a href="http://davis.wpi.edu:8180/DSRG/">http://davis.wpi.edu:8180/DSRG/</a></p> <p><a href="http://davis.wpi.edu/xmdv/">http://davis.wpi.edu/xmdv/</a></p> |
| <p><b>Georgetown University</b><br/><i>Research Assistant</i></p> <ul style="list-style-type: none"> <li>- <i>Information Retrieval Lab</i><br/>Supervisor: Dr. Nazli Goharian</li> </ul>  | <p>8/2011 – 5/2012<br/>Washington, DC</p> <p><a href="http://ir.cs.georgetown.edu/">http://ir.cs.georgetown.edu/</a></p>   |
| <p><b>University of Pittsburgh</b><br/><i>Research Assistant</i></p> <ul style="list-style-type: none"> <li>- <i>Personalized Adaptive Web Systems Lab</i><br/>Supervisor: Dr. Peter Brusilovsky &amp; Dr. Jung Sun Oh</li> </ul>  | <p>1/2011 – 4/2011<br/>Pittsburgh, PA</p>  |

## SERVICE & OTHER ACTIVITY

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### External Reviewer

- **ICDE 16'** International Conference on Data Engineering.
- **VLDB 15'** International Conference on Very Large Data Bases.
- **SIGMOD 15',17',18'** International Conference on Management of Data.
- **EDBT 14',17'** International Conference on Extending Database Technology.

### Conference Volunteer

- 28th IEEE International Conference on Data Engineering (ICDE 2012).

## AWARDS

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- Oak Ridge Institute for Science and Education (**ORISE**) Fellowship. 16' – 17', 17' – 18'.
- WPI Travel Award 14', 16', 17'.
- ACM SIGKDD Travel Award 17'.
- 3rd place in 2016 WPI Graduate Research and Innovation Exchange (GRIE) Poster Competition.
- Honorable mention in 2017 WPI GRIE Poster Competition.

## **TECHNICAL STRENGTHS**

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**Computer Languages**

Java, Python, C++, Ruby, Perl, C and SQL.

**Databases**

MySQL, Microsoft Access and SQL Server.

**Tools**

Hadoop, Pig, Oozie, Mahout, MatLab, Weka, Lingpipe, OpenNLP, Mallet, Lucene, Lemur , GNUPlot and  $\LaTeX$ .