Fatemeh Riahi

Faculty of Computing Science – Simon Fraser University – Canada

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Education

Faculty of Computing Science, Simon Fraser University   **Sep 2012- Present**
Ph.D., GPA: 3.67   *Burnaby, Canada*
Thesis: Outlier Detection in Multi-Relational Data
Expected Graduation Date: Spring 2016

Faculty of Computer Science, Dalhousie University   **Jan 2010–Apr 2012**
M.Sc., GPA:3.87   *Halifax, Canada*
Thesis: User Recommendation in Community Question Answering Services

Faculty of Computer Engineering, Sharif University of Technology   **Sep 2004–Apr 2009**
B.Sc.   *Tehran, Iran*

Technical Skills

Programming Languages: Java, Perl,R, MATLAB, C, C++

Web/DB Technologies: HTML, MySQL, PostgreSQL

Operating Systems: Unix/Linux based OS's, Windows

Machile Learning Tools: TetRad, Alchemy, Weka, Elki

Transferable Skills

○ Multitasking and Time Management

○ Planning, Setting and Attaining goals

○ Supervising, Presenting

Work Experience

SAP   **Jan 2016–Present**
Application Developer Intern   *Vancouver, Canada*
○ Participate in Building Scalable Software
○ Research and develop available algorithm to improve scalability
○ Documented the software manual and experimental results.

VoltageCRM   **Sep 2013–Mar 2014**
NSERC Engage Intern   *Vancouver, Canada*
○ Researched different Machine Learning Techniques using Weka and already developed methods in R to find the best algorithm to forecast stage transition in SalesForce Data
○ Re-programmed the HMM algorithm in C++ in order to increase the efficiency and scalability
○ Documented the software manual and experimental results in Word

Nosaze Co.   **Feb 2009–Nov 2009**
Software Developer   *Tehran, Iran*

- Designed relational databases using ER modeling to reduce development time
- Developed a user-friendly interface in Java to provide easy access to databases by all the employees of the company
- Prepared reports, manuals and other documentation in Latex on the status, operation and maintenance of the software

Research Projects

Machine Learning and Logic Lab   **Sep 2012–Present**
Graduate Research Assistant   *SFU, Canada*
- Study different Machine Learning Techniques theoretically in order to find the best match to solve the problem of ordering individuals and finding outliers
- Adopt and develop Bayesian Networks on multi-relational data in Java to evaluate the behaviour of different individuals
- Train undergraduate students by assigning them small parts of the projects

Networked information Spaces Lab   **Jan 2010–Mar 2012**
Graduate Research Assistant   *Dalhousie University, Canada*
- Studied the Community Question Answering (CQA) datasets by using topic modeling approaches in order to find the best answer for the new questions in CQA
- Designed and ran experiments on datasets in different sizes to ensure the scalability of the algorithm
- Prepared reports, manuals and other documentations in Latex on the status, operation and maintenance of the algorithm

Selected Technical Projects

- **Machine Learning and Pattern Recognition, SFU**,   **Sep 2012**
  - Modeled an algorithm by using Bayesian networks to estimate the contributions of players in different matches of soccer teams
- **Genetic Algorithms, Dalhousie University**   **Jan 2010**
  - Analyzed a multi-objective clustering algorithm to optimize complementary objectives based on cluster compactness and connectedness
- **Information Retrieval, Dalhousie University**   **May 2011**
  - Implemented a local search engine using Java on Reuters news dataset
- **Visualization, Dalhousie University**   **Jan 2010**
  - Developed a program by implementing FP-Tree algorithm to visualize tags in web folksonomies
- **Natural Language Processing, Dalhousie University**   **Sep 2011**
  - Extracted Spam information from blogs by implementing Naive Bayes algorithm

Selected Publications

- Riahi, F. and Schulte, O. (2015). Model-based Outlier Detection for Object-Relational Data, IEEE SSCI
- Riahi,F. and Schulte,O. (2015). Propositionalization for Unsupervised Outlier Detection in Multi-Relational Data, Submitted to AAAI
- Riahi,F. and Schulte,O. (2014) A proposal for Statistical Outlier Detection in Relational Structures , AAAI workshop on STARAI
- Riahi,F., Schulte, O. and Li,Q. (2013) Identifying Important Nodes in Relational Data, AAAI Late breaking Papers
- Riahi,F., Zolaktaf, Z., Shafie, M. and Milios, E. (2012). Finding Expert Users in Community-based Question Answering Services, WWW workshop on Community Question Answering, 2012

- Riahi,F., Zolaktaf, Z., Shafie, M. and Milios, E. (2011).Modeling Community Question Answering archives, , NIPS workshop on Computational Social Science

Honours And Awards

- Faculty of Graduate Studies Graduate Fellowship, Simon Fraser University, 2014 and 2015
- Faculty of Graduate Studies Tuition Scholarship, Dalhousie University, 2010 and 2012
- Ranked 8th in Nationwide University Entrance Exam among more than 500,000 participants, 2004