

Curriculum Vitae

Hossein Rahmani

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Education

- ◆ **Assistant Professor**
September 2015- Present [Iran University of Science and Technology](#), Tehran, Iran
[Department of Computer Engineering](#)
- ◆ **Research Fellow**
September 2015- Present [Maastricht University](#), Maastricht, Netherlands
[Department of Knowledge Engineering](#)
- ◆ **Post-Doc**
March 2014- September 2015 [Maastricht University](#), Maastricht, Netherlands
[Department of Knowledge Engineering](#)
Project: [Mining Social Structures from Genealogical Data](#)
- ◆ **Post-Doc**
August 2012 – March 2014 [Maastricht University](#), Maastricht, Netherlands
[Faculty of Arts and Social Sciences](#)
Project: [Databases on Political Responsiveness](#)
- ◆ **PhD**
November 2008 – August 2012 [Leiden University](#), Leiden, Netherlands
[Leiden Institute of Advanced Computer Science](#)
Thesis: Mining Annotated Graphs
- ◆ **M.Sc.**
Fall 2006 - Fall 2008 [Sharif University of Technology](#), Tehran, Iran
[Artificial Intelligence Department](#), GPA: 19.05/20
Thesis: Web Service Composition using AI planning methods

- ◆ **B.Sc.**
Fall 2001 - Fall 2006 [University of Tehran](#), Tehran, Iran
[Electrical and Computer Engineering Department](#), Major: Software Engineering
Thesis: Model Driven Architecture (MDA)

Executive Position

- ◆ **Graduate Manager**
June 2019- Present [Iran University of Science and Technology](#), Tehran, Iran
[Department of Computer Engineering](#)
- ◆ **Cultural Manager**
Dec 2016- June 2019 [Iran University of Science and Technology](#), Tehran, Iran
[Department of Computer Engineering](#)

Honors and Awards

- ◆ **Best selected Professor** at software group according to Student evaluation, Department of Computer Engineering, Iran University of Science and Technology, (2 times at 2016 and 2017).
- ◆ **Scientific Elite Student**, Qualified as a scientific elite student by the National Elite Institute of IRAN (2015).
- ◆ **ITRC Research Grant Award**, Telecommunication Research Center (ITRC) Research Grant, awarded to my Master thesis, (2008).
- ◆ **4th Rank** among more than 70 M.Sc. students at Department of Computer Engineering (Artificial Intelligence, Software Engineering, Computer Architecture, and Information Technology) at Sharif University of Technology. (GPA:19.05/20), 2006-2008.
- ◆ **5th Rank** among over 9,000 students in the National Graduate Entrance Examination in [Information Technology](#). Tehran, spring 2006.
- ◆ **14th Rank** among over 9,000 students in the National Graduate Entrance Examination in [Artificial Intelligence](#). Tehran, spring 2006.
- ◆ **44th Rank** among over 9,000 students in the National Graduate Entrance Examination in [Computer Engineering](#). Tehran, spring 2006.
- ◆ **400th Rank** among over 350,000 applicants in Iran's Nationwide University Entrance Examination, summer 2000.
- ◆ Among the top students in most of the graduate courses.

Publications: Journal papers

- ◆ R. Mahdavi, S. Fatehi and **H. Rahmani**: Predicting the Infertility Treatment Method Using Ensemble Methods and Outlier Analysis. In: Journal of Health Information Management (HIM 2019). Tehran Iran.
- ◆ B. Ranjbar-Sahraeia, **H. Rahmani**, G. Weiss and K. Tuyls: Distant Supervision of Relation Extraction in Sparse Data . Intelligent Data Analysis journal. To be appeared on Volume 23(5), 2019.
- ◆ **H. Rahmani**, G. Weiss, O. Mendez-Luciob and A. Bender: ARWAR: a Network Approach for Predicting Adverse Drug Reactions. Computers in Biology and Medicine, Volume 68, 1 January 2016, Pages 101-108.
- ◆ **H. Rahmani**, B. Ranjbar-Sahraeia, G. Weiss and K. Tuyls: Entity Resolution in Disjoint Graphs with Application on Genealogical Data. Intelligent Data Analysis journal, Volume 1, 2016, Pages 1-21.
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Using a Human Drug Network for Generating Novel Hypothesis about Drugs. Intelligent Data Analysis journal , Volum 20 (1), 2016, Pages 183-197.
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Using a Human Disease Network for Augmenting Prior Knowledge about Diseases. Intelligent Data Analysis journal, Volume 19(4), 2015, Pages 897-916.
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Predicting genes involved in human cancer using network contextual information. Journal of Integrative Bioinformatics, Volume 9(1), 2012, Pages 210-238.
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Predicting the functions of proteins in protein-protein interaction networks from global information. Journal of Machine Learning Research, Volume 8, 2010, Pages 82-97.

Publications: Conference/Workshop papers

- ◆ D. Javdani, **H. Rahmani**, M. Allahgholi, F. Karimkhani: DEEP BLOCK: A Novel Approach for Entity Resolution using Deep Learning. In: Fifth International Conference on Web Research (ICWR 2019). Tehran Iran
- ◆ H.Kamali, **H. Rahmani**, H. Shah-Hosseini: DINGA: Discovery of Important Nodes in social networks using Genetic Algorithms. Fourth International Conference on Web Research (ICWR 2018). Tehran Iran.
- ◆ V. Bashiri, **H. Rahmani**, and H. Bashiri: Finding Important Nodes in Social Networks. Third International Conference on Web Research (ICWR 2017). Tehran Iran. (In Press)V. Bashiri, H. Rahmani, and H. Bashiri: Finding Important Nodes in Social Networks. Third International Conference on Web Research (ICWR 2017). Tehran Iran.
- ◆ B. Ranjbar-Sahraei, J. Efremova, **H. Rahmani**, T. Calders, K. Tuyls and G. Weiss: HiDER: Query-Driven Entity Resolution for Historical Data. In European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases. (ECML PKDD, Demo Track).Porto, portugal. September 7-11, 2015.
- ◆ J. Efremova, B. Ranjbar-Sahraei, **H. Rahmani**, F. Oliehoek, T. Calders, K. Tuyls and G. Weiss: Multi-source entity resolution for genealogical data. In Population Reconstruction. Springer, 2015 (to appear).

- ◆ **H. Rahmani**, B. Ranjbar-Sahraei, G. Weiss and K. Tuyls: Contextual Entity Resolution Approach for Genealogical Data. In: Workshop on Knowledge Discovery, Data Mining and Machine Learning (KDML-2014). In Press, Aachen, Germany.
- ◆ **H. Rahmani** and C. Arnold: Policy Clusters: Government's Agenda Across Policies and Time. In: The 10th International conference on Beyond Databases Architectures and Structures (BDAS 2014).
- ◆ **H. Rahmani** and C. Arnold: Policy Miner: From Oysters to Pearls. In: The 6th Annual conference of the Comparative Agendas Project (CAP 2013).
- ◆ C. Arnold and **H. Rahmani**: Legislative dynamics in Ireland: The influence of public opinion and European legislation. In The 6th Annual conference of the Comparative Agendas Project (CAP 2013).
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Collaboration-based function prediction in protein-protein interaction networks. In: *Proceedings of the 10th International Symposium on Advances in Intelligent Data Analysis: 318-327, Lecture Notes in Computer Science 7014 Springer (2011)*
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Interaction-Based Feature Selection for Predicting Cancer-Related Proteins in Protein-Protein Interaction Networks. In: *Proceedings of the fifth International Workshop on Machine Learning in Systems Biology (MLSB 2011): 68-72, Vienna, Austria, July 20-21 (2011)*
- ◆ **H. Rahmani**, B. Piccart, H. Blockeel and D. Fierens: Three complementary approaches to context aware movie recommendation. In: *Proceedings of the Workshop on Context-Aware Movie Recommendation: 57-60, ACM (2010)*
- ◆ H. Blockeel, **H. Rahmani** and M. Witsenburg: On the importance of similarity measures for planning to learn. In: P. Brazdil, A. Bernstein & J. Kietz (Eds.), *19th European Conference on Artificial Intelligence, 3rd Planning to Learn workshop (PlanLeH.arn-2010): 69-74 (2010)*
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Collaboration based function prediction in protein-protein interaction networks. In: *Proceedings of the 7th International Symposium on Networks in Bioinformatics (2010)*
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Collaboration-based function prediction in protein-protein interaction networks. In: *European Conference on Computational Biology (2010)*
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Collaboration-based function prediction in protein-protein interaction networks. In: *Machine Learning in Systems Biology: Proceedings of the Fourth International Workshop: 55-58 (2010)*
- ◆ **H. Rahmani**, B. Nobakht and H. Blockeel: Collaboration-based social tag prediction in the graph of annotated web pages DyNaK 2010: Dynamic Networks and Knowledge Discovery. In: *DyNaK 2010: Dynamic Networks and Knowledge Discovery: 1-12 (2010)*
- ◆ S. Aliakbary, H. Abolhassani, **H. Rahmani** and B. Nobakht: Web Page Classification Using Social Tags. In: *IEEE 2009 International Conference on Computational Science and Engineering: 588-593 (2009)*
- ◆ **H. Rahmani**, H. Blockeel and A. Bender: Predicting the functions of proteins in PPI networks from global information. In: *Proceedings of the Third International Workshop on Machine Learning in Systems Biology: 85-94, Helsinki University Printing House (2009)*
- ◆ **H. Rahmani**, H. Abolhassani: Composite Web Service Failure Recovery Considering User Non-Functional Requirements. In: *4th International Conference on Next Generation Web Services Practice. pp. 39-45 (2008)*
- ◆ **H. Rahmani**, G. R. Sani and H. Abolhassani: Automatic Web Service Composition considering User Non-Functional Preferences. In: *4th International Conference on Next Generation Web Services Practice, Seoul, Oct. 2008, pp. 33-38 (2008)*
- ◆ **H. Rahmani**: AI Planning Search Time and Space Reduction Technique for the Problem of Web Service Composition. In: *First International symposium on search techniques in [1] Artificial intelligence and robotics, (AAAI 2008)*

Attended Workshops, Conferences, Course and other:

- ◆ **International Conference on Web Research**, 15-16 April 2015, Tehran (Iran), Poster
- ◆ **KDML**, 8-10 September 2014, Aachen (Germany), presentation
- ◆ **Machine Learning for System Biology**, 12-13 December 2013, Maastricht (Netherlands), attendee
- ◆ **The Comparative Agendas Project**, 27-29 June 2013, Antwerp (Belgium), presentation
- ◆ **Political Representation in Europe**, 25-26 October 2012, Wassenaar (Netherlands), presentation
- ◆ **Algorithms for Biological Networks**, 16-20 January 2012, Delft (Netherlands), attendee
- ◆ **PRIB'11**, 2-4 November 2011, Delft, The Netherlands, attendee
- ◆ **IDA'11**, 29-31 October 2011, Porto (Portugal), paper
- ◆ **MLSB'10**, 15-16 October 2010, Edinburgh (Scotland), paper
- ◆ **ECCB'10**, 26-29 September 2010, Ghent (Belgium), poster
- ◆ **ECML'10**, 20-24 September 2010, Barcelona (Spain), paper in workshop
- ◆ **Fluffy'10**, 15-16 March 2010, Boppard (Germany), presentation
- ◆ **MLSB'09**, 5-6 September 2009, Ljubljana (Slovenia), paper
- ◆ **ECML'09**, 7-11 September 2009, Bled (Slovenia), attendee
- ◆ **Optimizing Drug Design**, 20-23 July 2009, Leiden (Netherlands), attendee
- ◆ **Fluffy'09**, 18-20 March 2009, Grandpré (France), presentation

Teaching

- ◆ **Dynamic Complex Network** (Every semester from September 2016)
Department of computer Engineering, Iran University of Science and Technology
- ◆ **Data Mining** (Every semester from September 2015)
Department of computer Engineering, Iran University of Science and Technology
- ◆ **Databases** (2016 Every semester from September 2015),
Department of computer Engineering, Iran University of Science and Technology
- ◆ **Introduction to Formal Language and Automata** (Every semester from September 2015),
Department of computer Engineering, Iran University of Science and Technology
- ◆ **Data Analysis Skills** (November 2014 and April 2015)
Department of knowledge Engineering, Maastricht University
- ◆ **Database course** (September 2014),
Department of knowledge Engineering, Maastricht University

Skills

- ◆ **Big Data Analysis:** Map-Reduce, Spark
- ◆ **Data Analysis:** Data Mining, Web Mining, Text mining, Graph Mining, Machine Learning (Feature Selection, Classification and Clustering, etc), Pattern Recognition, Entity Resolution
- ◆ **Data Mining IDE:** WEKA, Clementine, Rapidminer

- ◆ **Programming Languages:** Java, Python, Scala, C++, Ruby, Scala
- ◆ **Software related skills:** 3-tier architecture, Service Oriented Architecture(SOA), Model Driven Architecture(MDA), UML, RUP, XP.

Reviewer

- ◆ Reviewer of Journal of Health Information Management (Spring 2019).
- ◆ Reviewer of 4th Iranian Conference on Signal Processing and Intelligent Systems (Jan 2019).
- ◆ Reviewer of Journal of Health Information Management (Spring 2017).
- ◆ Reviewer of International Conference on Web Research (2016).
- ◆ Member of Scientific Committee of International Conference on Web Research (2016).
- ◆ Reviewer of Computer Society of Iran Computer Conference (2016).
- ◆ Reviewer of Intelligent Data Analysis journal.
- ◆ Reviewer of IEEE/ACM Transactions on Computational Biology and Bioinformatics Journal.
- ◆ Reviewer of Journal of Computing.

Other Activities

- ◆ MSc students under my supervision at Iran University of Science and Technology
 - ◆ Paria Golshan-Rad: An Intelligent Ensemble Classification based System for Identifying Risk Factors of Refractive Errors
 - ◆ Milad Allahgholi: Using deep learning to extract semantic relationships from textual data
 - ◆ Delaram Jaydani : Recommending and Efficient Blocking Strategy in Entity Resolution using Deep Learning
 - ◆ Arezoo Zare :Construction of word association in Persian language and its use in the semantic analysis of Twitter hashtags
 - ◆ Zahra Akhgari :Dynamic analysis of the popular topics of social networks and their adaptation to external events and news
 - ◆ Motahareh Nasiri: Analyzing Personality Dimensions Using Text Data
 - ◆ Hasti Kamali: DINGA: Discovering Important Nodes in Graph Data using Genetic Algorithm
- ◆ Co-Supervising PhD student Bijan Ranjbar Sahraei in DKE department, Maastricht University
- ◆ Co-Supervising Master student Simon Rehker in DKE Department, Maastricht University
- ◆ Among the evaluation committee of Master thesis “Multi-label prediction using a dependency graph based on label correlations and conditional probabilities” by Gergely Kosztolanyi, August 8, 2014, DKE Department, Maastricht University
- ◆ Guest Lecture on “An Introduction to Graph Mining” for the master course Database and Data Mining (Fall 2011).
- ◆ Guest Lecture on “An Introduction to Graph Mining” for the master course Database and Data Mining (Fall 2010).

- ◆ Guest Lecture on “An Introduction to Graph Mining” for the master course Database and Data Mining (Fall 2009).

References

- ◆ **Gerhard Weiss**, Full Professor of Maastricht University, Gerhard.Weiss@maastrichtuniversity.nl
- ◆ **Hendrik Blockeel**, Full professor of Katholieke Universiteit Leuven, Hendrik.Blockeel@cs.kuleuven.be
- ◆ **Andreas Bender**, Lecturer at the Unilever Centre for Molecular Science Informatics, part of the Department of Chemistry of the University of Cambridge, ab454@cam.ac.uk
- ◆ **Gholam Reza Ghassem Sani**, Associate Professor of Department of Computer Engineering, Sharif University of Technology, sani@sharif.edu
- ◆ **Ramtin Khosravi**, Assistant Professor of Department of Electronic and Computer Engineering, University of Tehran, rkhosravi@ece.ut.ac.ir

Life Interests

- ◆ **Literature**: Read and memorize poems; being familiar with traditional poets
- ◆ **Movies**: Philosophical movies and cartoons
- ◆ **Music**: Prefer light and oxygen
- ◆ **Sports**: Swimming and Hiking are my favorites