Mohammad Aliannejadi

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Education

2015-present	**Doctor of Philosophy**, *Università della Svizzera italiana*, Lugano, Switzerland, Advisor: Fabio Crestani. Project: Relevance Criteria Combination for Mobile Information Retrieval (RelMobIR)
2011-2014	**Master of Science**, *Amirkabir University of Technology (Tehran Polytechnic)*, Tehran, Iran. Major: Computer Engineering, Minor: Artificial Intelligence
2006-2011	**Bachelor of Science**, *Hamedan University of Technology*, Hamedan, Iran. Major: Computer Engineering, Minor: Hardware

Research Interests

Information Retrieval and Text Mining

Recommender Systems

Natural Language Processing

Data Mining and Machine Learning

Research Visits

2018-present	Visiting Scholar, Center for Intelligent Information Retrieval (CIIR), University of Massachusetts Amherst, MA, USA (Duration: October 01 2018 – February 01 2019), Advisor: W. Bruce Croft
2018	Visiting Researcher, University of Udine, Italy (Duration: February 21 – 23 2018), Collaborator: Stefano Mizzaro
2017	Visiting Researcher, Institut de Recherche en Informatique de Toulouse (IRIT), France (Duration: July 07 – 15 2017), Collaborator: Josiane Mothe

Publications

2019	**Understanding Mobile Search Task Relevance and User Behaviour in Context**, *M. Aliannejadi, M. Harvey, L. Costa, M. Pointon, and F. Crestani*, ACM SIGIR Conference on Human Information Interaction and Retrieval (**CHIIR**), 2019, Glasgow, Scotland, UK (to appear).
2018	**Personalized Context-Aware Point of Interest Recommendation**, *M. Aliannejadi and F. Crestani*, ACM Transactions on Information Systems (**TOIS**), 36(4), 45:1-45:28 (2018).

2018 **In Situ and Context-Aware Target Apps Selection for Unified Mobile Search**, *M. Aliannejadi, H. Zamani, F. Crestani, and W. B. Croft*, International Conference on Information and Knowledge Management (**CIKM**), 2018, Turin, Italy, pages 1383-1392.

2018 **A Collaborative Ranking Model with Multiple Location-based Similarities for Venue Suggestion**, *M. Aliannejadi, D. Rafailidis, and F. Crestani*, International Conference on the Theory of Information Retrieval (**ICTIR**), 2018, Tianjin, China, pages 19-26.

2018 **Target Apps Selection: Towards a Unified Search Framework for Mobile Devices**, *M. Aliannejadi, H. Zamani, F. Crestani, and W. B. Croft*, International Conference on Research and Development in Information Retrieval (**SIGIR**), 2018, Ann Arbor, Michigan, USA, pages 215-224.

2017 **A Cross-Platform Collection for Contextual Suggestion**, *M. Aliannejadi, I. Mele, and F. Crestani*, International Conference on Research and Development in Information Retrieval (**SIGIR**) 2017, Tokyo, Japan, pages 1269-1272.

2017 **Venue Appropriateness Prediction for Personalized Context-Aware Venue Suggestion**, *M. Aliannejadi and F. Crestani*, International Conference on Research and Development in Information Retrieval (**SIGIR**), 2017, Tokyo, Japan, pages 1177-1180.

2017 **Personalized Keyword Boosting for Venue Suggestion based on Multiple LBSNs**, *M. Aliannejadi, D. Rafailidis, and F. Crestani*, European Conference on Information Retrieval (**ECIR**), 2017, Aberdeen, Scotland, pages 291-303.

2017 **Personalized Ranking for Context-Aware Venue Suggestion**, *M. Aliannejadi, I. Mele, and F. Crestani*, ACM Symposium on Applied Computing (SAC), 2017, Marrakesh, Morocco, pages 960-962.

2016 **Venue Appropriateness Prediction for Contextual Suggestion**, *M. Aliannejadi, I. Mele, F. Crestani*, Text REtrieval Conference (TREC), 2016, Gaithersburg, Maryland, USA.

2016 **User Model Enrichment for Venue Recommendation**, *M. Aliannejadi, I. Mele and F. Crestani*, Asia Information Retrieval Societies Conference (AIRS), 2016, Beijing, China, pages 212-223.

2015 **University of Lugano at TREC 2015: Contextual Suggestion and Temporal Summarization Tracks**, *M. Aliannejadi, SA. Bahrainian, A. Giachanou, F. Crestani*, Text REtrieval Conference (TREC), 2015, Gaithersburg, Maryland, USA.

2014 **Graph-Based Semi-Supervised Conditional Random Fields For Spoken Language Understanding Using Unaligned Data**, *M. Aliannejadi, M. Kiaeeha, S. Khadivi and S. Shiry Ghidary*, Australasian Language Technology Workshop (ALTW), 2014, Melbourne, Australia, pages 98-103.

2014 **Improved Churn Prediction In Telecommunication Industry Using Data Mining Techniques**, *A. Keramati, R. Jafari-Marandia, M. Aliannejadi, I. Ahmadian, M. Mozaffarian and U. Abbasi*, Elsevier Journal on Applied Soft Computing, 24, 994-1012 (2014).

2013 **Discriminative Spoken Language Understanding Using Statistical Machine Translation Alignment Methods**, _M. Aliannejadi, S. Khadivi, S. Shiry Ghidary, and M.H. Bokaei_, International Symposium on Artificial Intelligence and Signal Processing (AISP), 2013, Tehran, Iran, pages 194-202.

Honors

2016 Ranked first in the Contextual Suggestion Track, TREC 2016

2015 Ranked first in the Contextual Suggestion Track, TREC 2015

Academic Services

Peer Review

2018 **PC Member**.
- SIGIR 2018

2018 **Journal Reviewer**.
- ACM Transcations on Information Systems (TOIS)
- Elsevier Information Processing and Management (IP&M)

2015-present **External Reviewer**.
- ECIR 2016, 2019
- ICTIR 2017, 2018
- ICADL 2017, 2018
- CIKM 2017
- KDD 2015

Organization

2018-2019 **Local Organizer**, _The 10th CLEF Conference and Labs of the Evaluation Forum_, Università della Svizzera italiana (USI), Lugano, Switzerland.

2017-present **ACM SIGIR Student Liaison**, _Representing Europe and Africa_.

2017 **Publicity Chair**, _The 8th Italian Information Retrieval Workshop (IIR)_, Università della Svizzera italiana (USI), Lugano, Switzerland.

2015 **Co-Organizer**, _DBTA Workshop on Life Logging and Long-Term Digital Preservation_, Università della Svizzera italiana (USI), Lugano, Switzerland.

Experience

Teaching

2015-present **Teaching Assistant**, _Università della Svizzera italiana_, Lugano, Switzerland.
Teaching assistant for the following courses:
- Information Retrieval
- Databases
- User Experience Design
- Human-Computer Interaction Atelier

2010-2012	**Teaching Assistant**, *Hamedan University of Technology*, Hamedan, Iran.

Teaching assistant for the following courses:
- Advanced Programming: C++ Language
- Data Structures
- Introduction to Algorithms
- Introduction to Formal Languages and Automata

Professional

2014-2015	**.NET Developer**, *Batis Idea Processors Ltd.*, Tehran, Iran.

Developed C# .NET component for sending and receiving email and fax, which was a part of a big project.

2009-2012	**Software Designer and Developer**, *Hushmandsazan Bisim Gharb*, Hamedan, Iran.

Working with a team of Electrical Engineers, I did all the software design and development process to get a large Windows application integrated with the hardware designed for it.

Master Thesis

Title	*Language Understanding Using Semi-labeled Corpora in Robotics Applications*
Advisors	Saeed Shiry Gheidary, Shahram Khadivi
Description	The project follows completed research on spoken/formal language understanding using different machine learning approaches. I utilized graph-based semi-supervised conditional random fields (CRF) to train a spoken language understanding system using only 10% of the labeled data and improve the performance of the baseline models by the use of the unlabeled data.

Languages

Persian	**Native**
English	**Fluent**
Italian	**Intermediate**

Programming Skills

Tools

Pandas, Seaborn, NLTK, Galago, RankLib, Terrier, Lucene, CRFSuite, CRF++, Junto

Languages

Expert	Python, C, C++, C#
Intermediate	MATLAB, Java, PHP, MySQL, SQL Server
Basic	UML, HTML, Java, Javascript, Objective-C, Shell Script

Other Activities

2017-present	Occasional photographer and sports journalist.
2015	Co-organizer of USI Board Games Events series, Università della Svizzera italiana (USI), Lugano, Switzerland
2009-2011	Chair of HUT Association of Film and Music, Hamedan University of Technology, Hamedan, Iran

2006-2009 Chair of HUT Students Association, Hamedan University of Technology, Hamedan, Iran

References

Available upon request.