

Mohammad Alian Nejadi

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Education

- 2015-present **Doctor of Philosophy**, *Università della Svizzera italiana*, Lugano, Switzerland,
Adviser: 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), Adviser: W. Bruce Croft
Topic: Conversational Search
- 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

- 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.
- 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.

- 2018 **Personalized Context-Aware Point of Interest Recommendation**, *M. Aliannejadi and F. Crestani*, ACM Transactions on Information Systems (TOIS).
- 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.
- 2018 **Venue Suggestion Using Social-Centric Scores**, *M. Aliannejadi and F. Crestani*, Workshop on Social Aspects in Personalization and Search (SoAPS) at ECIR'18, Grenoble, France.
- 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.
- 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.
- 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.
- 2017 **Personalized Ranking for Context-Aware Venue Suggestion**, *M. Aliannejadi, I. Mele, and F. Crestani*, ACM Symposium on Applied Computing (SAC), 2017, Marrakesh, Morocco.
- 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.
- 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.
- 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.
- 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.

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 Transactions on Information Systems (TOIS)
 - Elsevier Information Processing and Management (IP&M)
- 2015-present **External Reviewer.**
 - ICTIR 2017, 2018
 - ICADL 2017, 2018
 - CIKM 2017
 - ECIR 2016
 - 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.

PhD Thesis

- Title Modeling Context for Mobile Information Retrieval
- Adviser Fabio Crestani
- Description My PhD topic is mostly concerned with modeling users' context using their mobile phones. I have studied context under two different scenarios related to mobile information retrieval. First, people use their smartphones to check-in several venues. Here, the aim of the system is to model their context for a more effective venue recommendation. Second, after defining the task of unified mobile search, I concentrated on modeling users' app usage context for selecting relevant apps to a given user query on their smartphones.

Master Thesis

- Title *Language Understanding Using Semi-labeled Corpora in Robotics Applications*
- Advisers 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, Terrier, Lucene, CRFSuite, CRF++, Junto, AT&T FSM

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.