

Mohammad Aliannejadi

Stabile Informatica, Office 200 (Level 2), Via Buffi 13
6904 Lugano

✉ mohammad.alian.nejadi@usi.ch

🌐 aliannejadi.com

Education

- 2015-present **Doctor of Philosophy**, *Università della Svizzera italiana*, Lugano, Switzerland,
Advisor: Fabio Crestani.
Project: Relevance Criteria Combination for Mobile Information Retrieval (RelMobIR)
- 2018-2019 **Visiting Scholar**, *Center for Intelligent Information Retrieval (CIIR)*, *University of Massachusetts*, Amherst, MA, USA, Advisor: W. Bruce Croft.
Project: Asking Clarifying Questions in Conversational Search Systems
- 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

Selected 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 **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 **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.
- 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 **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).
- 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.

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-present **Journal Reviewer.**
- ACM Transactions on Information Systems (TOIS)
 - IEEE Transactions on Knowledge and Data Engineering (TKDE)
 - Elsevier Information Processing and Management (IP&M)
- 2018 **PC Member.**
- SIGIR 2018
- 2015-present **External Reviewer.**
- JCDL 2019
 - 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 was in charge of the whole process of software design and development process to release a comprehensive software integrated with the hardware designed for it.

PhD Thesis

Title Modeling Context for Mobile Information Retrieval

Advisor 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*

Advisor 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

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

Languages

Expert Python, C, C++, C#
Intermediate MATLAB, Java, PHP, MySQL, SQL Server
Basic UML, HTML, 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, Iran

References

Available upon request.