Mohammad Aliannejadi

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Education

2015-present **Doctor of Philosophy**, *Università della Svizzera italiana*, Lugano, Switzerland.
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

Publications

2017 **Personalized Keyword Boosting for Venue Suggestion based on Multiple LBSNs**, *M. Aliannejadi, D. Rafailidis, and F. Crestani*, ECIR 2017, Aberdeen, Scotland.
in press

2017 **Personalized Ranking for Context-Aware Venue Suggestion**, *M. Aliannejadi, I. Mele, and F. Crestani*, SAC 2017, Marrakesh, Morocco.
in press

2016 **Venue Appropriateness Prediction for Contextual Suggestion**, *M. Aliannejadi, I. Mele, F. Crestani*, Proceedings of The Twenty-Fifth Text REtrieval Conference, TREC, 2016, Gaithersburg, Maryland, USA.
in press

2016 **User Model Enrichment for Venue Recommendation**, *M. Aliannejadi, I. Mele and F. Crestani*, Proceedings of The Twelfth Asia Information Retrieval Societies Conference (AIRS) 2016, Tsinghua University, Beijing, China.

2015 **University of Lugano at TREC 2015: Contextual Suggestion and Temporal Summarization Tracks**, *M. Aliannejadi, SA. Bahrainian, A. Giachanou, F. Crestani*, Proceedings of The Twenty-Fourth 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*, Proceedings of Australasian Language Technology Workshop 2014, RMIT, 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*, Applied Soft Computing (Elsevier).
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, Sharif University of Technology, Tehran, Tehran, Iran.

Experience

2015-present	**Teaching Assistant**, *Università della Svizzera italiana*, Lugano, Switzerland. Teaching assitance for courses: Information Retrieval Databases
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.
2010-2012	**Teaching Assistant**, *Hamedan University of Technology*, Hamedan, Iran. Teaching assistance for courses: Advanced Programming: C++ Language Data Structures Introduction to Algorithms Introduction to Formal Languages and Automata There's been series of private classes on this courses I managed to handle either.
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.

Honors

2016	Ranked first in the Contextual Suggestion Track, TREC 2016
2015	Ranked first in the Contextual Suggestion Track, TREC 2015

Master Thesis

Title	*Language Understanding Using Semi-labeled Corpora in Robotics Applications*
Supervisors	Saeed Shiry Gheidary, Shahram Khadivi
Description	Project follows completed research on spoken/formal language understanding using different machine learning approaches. I utilized Graph-based Semi-supervised CRF to learn the SLU system using only 10% of the labeled data and improve the basic system's performance by the use of the unlabeled data knowledge. The implementation consists of development in Java language, and Python. Many toolboxes such as CRFSuite and Junto which are in C and Scala languages are edited to be compatible for the project's purpose.

Bachelor Thesis

Title	*Car Number-plate Detection and Recognition In Persian*
Supervisor	Hassan Khotanloo

Description	Project based on MATLAB language; Persian car number-plate is first detected and then by segmentation in the numbers and alphabet of the number-plate, it is recognized. I have utilized various image processing techniques to detect the number-plate and used 2D Image Correlation to recognize the numbers and the alphabet.

Other Projects

Master projects

C++	Implementation of a Naïve Bayes Text Classifier in C++ Language. I trained and tested this classifier on 20-newsletter corpus.
MATLAB	Implementation of Self Organizing Maps artificial neural network in MATLAB using 1D and 2D neighborhood with training visualization.
MATLAB	Optimization of an edge - detection algorithm using compiler transformations
MATLAB	Implementation of Perceptron neural network in MATLAB.
MATLAB	Implementation of Q-learning in MATLAB with visualization of the training process.
Python	Implementation of a Maximum Entropy Sequential Tagger for the purpose of SLU in Robotics.
Misc.	Design of a basic Statistical Machine Translator using AT&T Finite State Machines tools.
Python	Implementation of a simple Conditional Random Fields Sequential Tagger

Bachelor Projects

C++	Implementation of logic circuit simulator under MFC for GUI.
C++	Implementation of an Assembly Language Editor and Compiler.
C#	Implementation of a LZW Compressor with the design of the self-extractor for the compressed files.
C#	Development of a client/server file transfer using TCP/IP protocol.

Miscellaneous Projects

ASP 3.0	Design and development of a Persian fun and humor community website.
PHP	Editing the PHP-Fusion CMS to customize it for university portal.

Languages

Persian	**Native**
English	**Fluent**
Italian	**Elementary**

Computer Skills

Basic	UML, HTML, Java, Javascript, Objective-C, Shell Script
Intermediate	MATLAB, Python, PHP, MySQL, SQL Server
Expert	C, C++, C#, Latex
Tools	NLTK, CRFSuite, CRF++, Junto, AT&T FSM
Miscellaneous	Linux, Mac OS X, Windows

Other Activities

2015	Organized games of USI Board Games Club, Università della Svizzera italiana, Lugano, Switzerland
2009-2011	Head of HUT Film Club, Hamedan University of Technology, Hamedan, Iran
2006-2009	Head of HUT Students Association, Hamedan University of Technology, Hamedan, Iran