

EHSAN KAMALLOO

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EDUCATION

- 2016 - 2020 **Ph.D. Computing Science**, University of Alberta, Edmonton, Canada.
Thesis: “Semantic Matching in Natural Language Text At Scale”
Supervised by Davood Rafiei
GPA: 4.0/4.0
- 2008 - 2011 **M.Sc. Software Engineering**, Tarbiat Modares University, Tehran, Iran.
Thesis: “Credit Management Using Artificial Immune System”
GPA: 15.91/20
- 2004 - 2008 **B.Sc. Software Engineering**, University of Tehran, Tehran, Iran.
Thesis: “A Morphology-based Stemmer for Persian language”
GPA: 15.28/20

RESEARCH INTERESTS

Natural Language Processing • Information Retrieval • Dialogue Systems • Generative Models for Natural Language • Big Data Analytics

RESEARCH EXPERIENCE

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| <i>Present</i> | Research Assistant , University of Alberta, Edmonton, Canada. |
| 2016 | Study scalability problems of semantic matching techniques on natural language text,
Investigate how to generate informative and coherent responses in neural dialogue models. |
| 2011 | Research Assistant , Tarbiat Modares University, Tehran, Iran. |
| 2008 | Devised a classifier, implemented in Weka framework, to extract if-then rules exploiting evolutionary algorithms and fuzzy logic,
Our algorithm outperformed state-of-the art in the credit scoring domain. |
| 2008 | Research Assistant , University of Tehran, Tehran, Iran.
Developed a stemmer for Persian language based on morphological analysis. |

PUBLICATIONS

Conference Proceedings and Preprints

- [1] Nouha Dziri, **Ehsan Kamalloo**, Kory W. Mathewson, and Osmar R. Zaiane (2019), “Evaluating Coherence in Dialogue Systems using Entailment”, in *NAACL*.
- [2] Nouha Dziri, **Ehsan Kamalloo**, Kory W. Mathewson, and Osmar R. Zaiane (2018), “Augmenting Neural Response Generation with Context-Aware Topical Attention”, preprint [arXiv:1811.01063](https://arxiv.org/abs/1811.01063).
- [3] **Ehsan Kamalloo** and Davood Rafiei (2018), “A coherent unsupervised model for toponym resolution”, in *World Wide Web (WWW) Conference*, pp. 1287-1296.

- [4] **Ehsan Kamaloo** and Mohammad Saniee Abadeh (2010), “An artificial immune system for extracting fuzzy rules in credit scoring”, in *IEEE Congress on Evolutionary Computation (CEC)*, pp. 1-8.
- [5] **Ehsan Kamaloo** and Mohammad Saniee Abadeh (2010), “Comprehensible credit scoring with fuzzy artificial immune system”, in *18th Iranian Conference on Electrical Engineering (ICEE)*, pp. 542-547.
- [6] Abolfazl AleAhmad, **Ehsan Kamaloo**, Arash Zareh, Masoud Rahgozar, and Farhad Oroumchian (2008), “Cross language experiments at Persian@ CLEF 2008”, in *Cross Language Evaluation Forum (CLEF)*, pp. 105-112.

Journal

- [7] **Ehsan Kamaloo** and Mohammad Saniee Abadeh (2014), “Credit risk prediction using fuzzy immune learning”, in *Advances in Fuzzy Systems*, 2014: 7.

PROFESSIONAL EXPERIENCE

2016	Director of Research and Development at ODDRUN startup, Tehran, Iran
2013	Led technical strategy, and managed R&D team, Developed who-to-follow suggestion system in a location-based social network with more than 200K users, Orchestrated scalable real-time engine to synchronize data with external applications through live data streaming via Kafka, Apache Spark and Redis.
2013	Software Architect and Senior Software Engineer at FANAP, Tehran, Iran
2010	Led a 4-person technical team in the insurance solution division, Delivered a code generator (JSF, Spring, and Hibernate ORM) based on model-driven development guidelines, Responsible for recruiting new technical staff, Directed team meetings to check on progress and assign tasks to team members.
2010	Full-Stack Software Engineer at FANAP, Tehran, Iran
2008	Analyzed, designed, and developed property insurance module, life insurance module, and accounting platform as subsystems of an integrated core insurance solution. The software was deployed at nation-wide scale for two major insurance corporations.

TEACHING EXPERIENCE

2018 - Present	Teaching Assistant for <i>Database Management Systems</i> (2 semesters).
2016 - 2018	Teaching Assistant for <i>Introduction to File and Database Management</i> (4 semesters).

HONORS AND AWARDS

2018	Recipient of Graduate Student Teaching Award recognized by Faculty of Graduate Studies and Research.
2008	Ranked 132nd among +10,000 participants in nation-wide graduate studies entrance exam (Earned admission to Tarbiat Modares University).
2004	Ranked 610th among approximately 400,000 participants in nation-wide undergraduate studies entrance exam in Mathematics and Physics (Earned admission to University of Tehran).

TECHNICAL COMPETENCIES

Programming Language: Python, Java, Scala, C/C++, Lua, MATLAB
Database: Oracle, MySQL, PostgreSQL, SQLite
Build Manager: C/C++ Makefile, Ant, Maven, SBT
Framework: TensorFlow, Hadoop, Spark, Elasticsearch, Kafka, Redis, Lucene,
Spring, Hibernate ORM

VOLUNTEER EXPERIENCE

2018 - *Present* Treasurer at Computing Science Graduate Students' Association (CSGSA)
2017 - *Present* Representative at University of Alberta Swim Club
2016 - *Present* Databases Lab Manager at University of Alberta