EHSAN KAMALLOO

Homepage: https://cs.ualberta.ca/~kamalloo GitHub: https://github.com/ehsk Email: kamalloo@ualberta.ca Phone: +1 (780) 707-8820

EDUCATION

2016 - 2022 Ph.D. Computing Science, University of Alberta, Edmonton, Canada.

Thesis: "Robust Knowledge Acquisition in Answering Information-seeking Questions"

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 Systems"

2004 - 2008 B.Sc. Software Engineering, University of Tehran, Tehran, Iran.

Thesis: "A Morphology-based Stemmer for the Persian language"

RESEARCH EXPERIENCE

Sep 2022	Research Assistant, University of Alberta, Edmonton, Canada.
Sep 2016	Explore information retrieval models suitable for NLP tasks.
Now	Associate Researcher (part-time), Huawei Noah's Ark, Montreal, Canada.
Jan 2022	Work on sample efficiency in NLP and multilingual retrieval.
Mar 2021	Research Intern, Huawei Noah's Ark, Montreal, Canada.
Sep 2020	Worked on sample efficiency and data augmentation in NLP.

PUBLICATIONS

Preprints

- [1] **Ehsan Kamalloo**, Charles Clarke, and Davood Rafiei (2022), "Document-level Reasoning: A Hidden Challenge in Open-domain Question Answering Benchmarks."
- [2] Nouha Dziri, **Ehsan Kamalloo**, Sivan Milton, Osmar Zaiane, Mo Yu, Edoardo M. Ponti, and Siva Reddy (2022), "FAITHDIAL: A Faithful Benchmark for Information-Seeking Dialogue."

Conference Proceedings and Journals

- [1] Mehdi Akbarian Rastaghi, **Ehsan Kamalloo**, and Davood Rafiei (2022), "Probing the Robustness of Pre-trained Language Models for Entity Matching.", in *CIKM*.
- [2] **Ehsan Kamalloo**, Mehdi Rezagholizadeh, and Ali Ghodsi (2022), "When Chosen Wisely, More Data Is What You Need: A Universal Sample-Efficient Strategy For Data Augmentation," in *ACL Findings*.
- [3] Mostafa Yadegari, **Ehsan Kamalloo**, and Davood Rafiei (2022), "Detecting Frozen Phrases in Open-Domain Question Answering," in *SIGIR*.

- [4] **Ehsan Kamalloo**, Mehdi Rezagholizadeh, Peyman Passban, and Ali Ghodsi (2021), "Not Far Away, Not So Close: Sample Efficient Nearest Neighbour Data Augmentation via MiniMax," in *ACL Findings*.
- [5] Nouha Dziri, **Ehsan Kamalloo**, Kory W. Mathewson, and Osmar R. Zaiane (2019), "Evaluating Coherence in Dialogue Systems using Entailment," in *NAACL*.
- [6] Nouha Dziri, Ehsan Kamalloo, Kory W. Mathewson, and Osmar R. Zaiane (2019), "Augmenting Neural Response Generation with Context-Aware Topical Attention," in ACL Workshop on NLP for Conversational AI (NLP4ConvAI).
- [7] **Ehsan Kamalloo** and Davood Rafiei (2018), "A coherent unsupervised model for toponym resolution," in *World Wide Web (WWW) Conference*, pp. 1287-1296.
- [8] **Ehsan Kamalloo** and Mohammad Saniee Abadeh (2014), "Credit risk prediction using fuzzy immune learning," in *Advances in Fuzzy Systems*, 2014: 7.
- [9] **Ehsan Kamalloo** 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.
- [10] Abolfazl AleAhmad, **Ehsan Kamalloo**, Arash Zareh, Masoud Rahgozar, and Farhad Oroumchian (2008), "Cross language experiments at Persian@ CLEF 2008," in *Cross Language Evaluation Forum (CLEF)*, pp. 105-112.

ACADEMIC SERVICE

Reviewing:

- Conferences: ACL Rolling Review, EMNLP 2022, EMNLP 2021, ACL 2021, NAACL 2021, EACL 2021, EMNLP 2020, ACL 2020.
- Workshops: Efficient Natural Language and Speech Processing at NeurIPS 2022 & 2021, SustaiNLP at EMNLP 2021, Student Research Workshop at NAACL 2021 and EACL 2021, SustaiNLP at EMNLP 2020, Student Research Workshop at ACL 2019, 2020.

TEACHING EXPERIENCE

Student Advisor

Master's thesis: Mostafa Yadegari and Mehdi Akbarian (University of Alberta). *Undergrad Interns*: Boris Fleysher and Peter Elliott (University of Alberta).

Mar 2022	Guest Lecturer for Introduction to Computational Natural Language Pro-
	cessing, McMaster University, Canada.

Nov 2021 Guest Lecturer for Foundation Models in Natural Language Processing, University of Tehran, Iran.

2018 - 2019 | **Teaching Assistant** for Database Management Systems.

2016 - 2018 | **Teaching Assistant** for Introduction to File and Database Management.

PROFESSIONAL EXPERIENCE

2016	Director of Research and Development at Oddrun startup, Tehran, Iran
2013	Led technical strategy, and managed R&D team,
	Developed a recommender system in a location-based social network with ${\sim}200\mathrm{K}$ users,
2013	Software Architect and Senior Software Engineer at Fanap, Tehran, Iran
2010	Led a 4-person technical team in the insurance solution division,
2010	Full-Stack Software Engineer at Fanap, Tehran, Iran
2008	Developed property insurance, life insurance and accounting software, components of an enterprise
	integrated insurance solution, deployed at nation-wide scale.

TECHNICAL SKILLS

Programming Language: Python, Java, Scala, C/C++, Lua

ML Framework: PyTorch, TensorFlow

Database: Oracle, MySQL, PostgreSQL, SQLite

Framework: Spark, Hadoop, Elasticsearch, Lucene, Redis, Kafka