# EHSAN KAMALLOO

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### Professional Experience

Jan 2023 - Now **Post-doctoral Fellow**, David R. Cheriton School of Computer Science, University of Waterloo, Waterloo, Canada.

Mar 2021 - Dec 2022 Associate Researcher (part-time), Huawei Noah's Ark, Montreal,

Canada.

SEP 2020 - MAR 2021 Research Intern, Huawei Noah's Ark, Montreal, Canada.

#### EDUCATION

2016 - 2022 Ph.D. Computing Science, University of Alberta, Edmonton, Canada.
 Thesis: "Robust Knowledge Acquisition in Answering Information-seeking Questions 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 Systems"

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

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

#### SELECTED PUBLICATIONS

#### **Preprints**

[1] **Ehsan Kamalloo**, Nandan Thakur, Carlos Lassance, Xueguang Ma, Jheng-Hong Yang, and Jimmy Lin (2023), "Resources for Brewing BEIR: Reproducible Reference Models and an Official Leaderboard."

### Conference Proceedings and Journals

- [1] **Ehsan Kamalloo**, Nouha Dziri, Charles Clarke, and Davood Rafiei (2023), "Evaluating Open-Domain Question Answering in the Era of Large Language Models," in *ACL* (oral).
- [2] Ehsan Kamalloo, Xinyu Zhang, Odunayo Ogundepo, Nandan Thakur, David Alfonso-Hermelo, Mehdi Rezagholizadeh, and Jimmy Lin (2023), "Evaluating Embedding APIs for Information Retrieval," in *ACL Industry Track*.
- [3] **Ehsan Kamalloo**, Charles Clarke, and Davood Rafiei (2023), "Limitations of Open-Domain Question Answering Benchmarks for Document-level Reasoning," in *SIGIR*.

- [4] Xinyu Zhang, Nandan Thakur, Odunayo Ogundepo, **Ehsan Kamalloo**, David Alfonso-Hermelo, Xiaoguang Li, Qun Liu, Mehdi Rezagholizadeh, and Jimmy Lin (2022), "Making a MIRACL: Multilingual Information Retrieval Across a Continuum of Languages," in *TACL*.
- [5] 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," in *TACL*.
- [6] Mehdi Akbarian Rastaghi, **Ehsan Kamalloo**, and Davood Rafiei (2022), "Probing the Robustness of Pre-trained Language Models for Entity Matching," in *CIKM*.
- [7] **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*.
- [8] Mostafa Yadegari, **Ehsan Kamalloo**, and Davood Rafiei (2022), "Detecting Frozen Phrases in Open-Domain Question Answering," in *SIGIR*.
- [9] **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*.
- [10] Nouha Dziri, **Ehsan Kamalloo**, Kory W. Mathewson, and Osmar R. Zaiane (2019), "Evaluating Coherence in Dialogue Systems using Entailment," in *NAACL*.
- [11] 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)*.
- [12] **Ehsan Kamalloo** and Davood Rafiei (2018), "A coherent unsupervised model for toponym resolution," in *World Wide Web (WWW) Conference*, pp. 1287-1296.
- [13] 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 2023, CIKM 2023, ACL 2023, EACL 2023, EMNLP 2022, EMNLP 2021, ACL 2021, NAACL 2021, EACL 2021, EMNLP 2020, ACL 2020.
- Workshops: DialDoc Workshop at ACL 2023, 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, 2023.

#### Organizing:

 Multilingual Information Retrieval Across a Continuum of Languages (MIRACL), WSDM Cup 2023.

## 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.
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2018 - 2019	Teaching Assistant for Database Management Systems.
2016 - 2018	Teaching Assistant for Introduction to File and Database Management.

# Industrial Experience

2016 2013	Director of Research and Development at Oddrun startup, Tehran, Iran 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 2010	Software Architect and Senior Software Engineer at Fanap, Tehran, Iran Led a 4-person technical team in the insurance solution division,
2010 2008	Full-Stack Software Engineer at FANAP, Tehran, Iran Developed property insurance, life insurance and accounting software, components of an enterprise integrated insurance solution, deployed at nation-wide scale.