




# ZAHRA ABBASIANAEB

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## RESEARCH INTERESTS

Information Retrieval, Conversational Search, Personalized Search, Evaluation, Benchmarking, Natural Language Processing, and Question Answering Systems.

## EDUCATION

**Ph.D. Candidate of Informatics Institute - Information Retrieval Lab (IRLab)** 2023 - 2026

University of Amsterdam (UVA), Amsterdam, The Netherlands.

**Thesis:** Conversational Search and Recommendation.

**Supervisors:** Dr. Mohammad Alian Nejadi and Prof. Dr. Evangelos Kanoulas

**M.Sc. of Artificial Intelligence and Robotics, GPA: 18.65/20 (3.73/4)** 2018 - 2021

Amirkabir University of Technology (Tehran Polytechnics), Tehran, Iran.

**Thesis:** Text-based Question Answering with Deep Attentional Neural Networks.

**Supervisors:** Dr. Saeedeh Momtazi

**B.Sc. of Software Engineering, GPA: 18.39/20 (3.68/4)** 2014 - 2018

Amirkabir University of Technology (Tehran Polytechnics), Tehran, Iran.

## WORK EXPERIENCE

**Machine Learning Scientist Intern, Booking.com** 2025

Amsterdam, The Netherlands.

**Project:** Synthetic Data Generation.

**Researcher, Leiden Institute of Advanced Computer Science (LIACS)** 2022

Leiden University, Leiden, The Netherlands.

**Project:** Linking patents to scientific publications through in-text reference mining.

**Supervisors:** Prof. Dr. Suzan Verberne and Dr. Jian Wang

## BOOKS

Momtazi, Saeedeh, and **Zahra Abbasiantaeb** Question Answering over Text and Knowledge Base. Springer Nature, 2022. [\[pdf\]](#)

## SELECTED PUBLICATIONS

**Abbasiantaeb Zahra\***, Simon Lupart\*, Leif Azzopardi, Jeffry Dalton, and Mohammad Aliannejadi. “Conversational Gold: Evaluating Personalized Conversational Search System using Gold Nuggets”, Proceedings of the 48th International ACM SIGIR Conference on Research and Development in Information Retrieval. 2025.

Maryam Mousavian, **Abbasiantaeb Zahra**, Mohammad Aliannejadi, and Fabio Crestani. “Towards Fair Rankings: Leveraging LLMs for Gender Bias Detection and Measurement”, Proceedings of the 2025 International ACM SIGIR Conference on Innovative Concepts and Theories in Information Retrieval (ICTIR). 2025.

**Abbasiantaeb Zahra**, Simon Lupart, and Mohammad Aliannejadi. “Generating Multi-Aspect Queries for Conversational Search.” *arXiv preprint arXiv:2403.19302* (2024), (under review). [\[pdf\]](#)

Clemencia Siro\*, **Abbasiantaeb Zahra\***, Yifei Yuan, Maarten de Rijke, and Mohammad Aliannejadi. “Do Images Clarify? A Study on the Effect of Images on Clarifying Questions in Conversational Search”, Proceedings of the 2025 ACM SIGIR Conference on Human Information Interaction and Retrieval. 2025.

**Abbasiantaeb Zahra**, Chuan Meng, Leif Azzopardi, and Mohammad Aliannejadi. “Improving the Reusability of Conversational Search Test Collections”, European Conference on Information Retrieval. Cham: Springer Nature Switzerland, 2025.

Simon Lupart\*, **Abbasiantaeb Zahra\***, and Mohammad Aliannejadi. “IRLab@iKAT24: Learned Sparse Retrieval with Multi-aspect LLM Query Generation for Conversational Search”, TREC 2024. [pdf]

**Abbasiantaeb Zahra**, Suzan Verberne and Jian Wang. Abbasiantaeb, Zahra, Suzan Verberne, and Jian Wang. ”Tracing science-technology-linkages: A machine learning pipeline for extracting and matching patent in-text references to scientific publications.” Information Processing & Management 62.6 (2025): 104264.

**Abbasiantaeb Zahra**, Chuan Meng, Leif Azzopardi, and Mohammad Aliannejadi. “Can We Use Large Language Models to Fill Relevance Judgment Holes?” (accepted at EMTCIR workshop, SIGIR-AP 2024) *arXiv preprint arXiv:2405.05600* (2024). [pdf]

Aliannejadi, Mohammad, **Zahra Abbasiantaeb**, Shubham Chatterjee, Jeffrey Dalton, and Leif Azzopardi. “TREC iKAT 2023: A Test Collection for Evaluating Conversational and Interactive Knowledge Assistants.” In *Proceedings of the 47th International ACM SIGIR Conference on Research and Development in Information Retrieval*, pp. 819-829, 2024. [pdf]

**Abbasiantaeb Zahra**, Yifei Yuan, Evangelos Kanoulas, and Mohammad Aliannejadi. “Let the llms talk: Simulating human-to-human conversational qa via zero-shot llm-to-llm interactions.” In *Proceedings of the 17th ACM International Conference on Web Search and Data Mining*, pp. 8-17. 2024. [pdf]

**Abbasiantaeb Zahra**, Chuan Meng, David Rau, Antonis Krasakis, Hossein A. Rahmani, and Mohammad Aliannejadi. “LLM-based Retrieval and Generation Pipelines for TREC Interactive Knowledge Assistance Track (iKAT) 2023.” *TREC*, 2023.

Murgia, Emilian, **Zahra Abbasiantaeb**, Mohammad Aliannejadi, Theo Huibers, Monica Landoni, and Maria Soledad Pera. “ChatGPT in the Classroom: A Preliminary Exploration on the Feasibility of Adapting ChatGPT to Support Children’s Information Discovery.” In *Adjunct Proceedings of the 31st ACM Conference on User Modeling, Adaptation, and Personalization*, pp. 22-27. 2023. [pdf]

Darvishi, Kusra, Newsha Shahbodaghkhan, **Zahra Abbasiantaeb**, and Saeedeh Momtazi. “PQuAD: A Persian question answering dataset”. *Computer Speech & Language* 80 (2023): 101486. [pdf]

**Abbasiantaeb Zahra**, Suzan Verberne, and Jian Wang. “Optimizing BERT-based reference mining from patents.” *PatentSemTech 2022* (2022): 4. [pdf]

**Abbasiantaeb Zahra**, and Saeedeh Momtazi. “Entity-aware answer sentence selection for question answering with transformer-based language models.” *Journal of Intelligent Information Systems* 59.3 (2022): 755-777. [pdf]

**Abbasiantaeb Zahra** and Saeedeh Momtazi. “Text based question answering from information retrieval and deep neural network perspectives: A survey” *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery* 11.6 (2021): e1412. [pdf]

**HONORS AND AWARDS**

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<b>Ranked 1st</b> in TREC iKAT 2024 competition.	2024
<b>Nominated</b> for Apple Scholars PhD fellowship in AI/ML.	2024
<b>Received</b> SIGIR student travel grant from ACM.	2024
<b>Ranked 1st</b> in TREC iKAT 2023 competition.	2023
<b>Received</b> SIGIR Registration grant from WIR (Woman In the IR).	2022
<b>Ranked 1st</b> based on GPA, Amirkabir University of Technology, Tehran, Iran.	2020
<b>Invited to Exchange Program</b> , Passau, Germany.	2020
<b>Ranked 5</b> , based on GPA, Amirkabir University of Technology, Tehran, Iran.	2018
<b>Offered direct admission to graduate school</b> , Amirkabir University of Technology, Tehran, Iran.	2017
<b>Ranked 212</b> , in the National University Entrance Exam among more than 70,000 students, Iran.	2014

## ACADEMIC SERVICES

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<b>Co-organizer:</b> TREC Interactive Knowledge Assistant Track (iKAT).	2024
<b>Conference Reviewer:</b> CLEF, SIGIR, CIKM, LLM4Eval and E-commerce workshops of SIGIR.	2024
<b>Co-organizer:</b> TREC Interactive Knowledge Assistant Track (iKAT).	2023

## TUTORIALS

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<b>Title:</b> Query Understanding in LLM-based Conversational Information Seeking	July 2025
<b>Conference:</b> SIGIR 2025, Padua, Italy.	

## INVITED TALKS

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<b>Simulation of Conversation</b> , Qazvin Islamic Azad University (QIAU), Iran.	May 2024
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## TEACHING EXPERIENCE

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<b>Information Retrieval 0, B.Sc.</b> , University of Amsterdam (UVA)	Fall 2024
<b>Information Retrieval 0, B.Sc.</b> , University of Amsterdam (UVA)	Fall 2023
<b>An introduction to Natural Language Processing (NLP)</b> , Hamrah Academy	Summer 2021
<b>Information Retrieval and Web Search, M.Sc.</b> , Amirkabir University of Technology (AUT)	Fall 2019
<b>Machine Learning, M.Sc.</b> , Amirkabir University of Technology (AUT)	Spring 2019
<b>Artificial Intelligence, B.Sc.</b> , Amirkabir University of Technology (AUT)	Spring 2018
<b>System Design and Analysis, B.Sc.</b> , Amirkabir University of Technology (AUT)	Fall 2016
<b>Advanced Computer Programming, B.Sc.</b> , Amirkabir University of Technology (AUT)	Spring 2016
<b>Principals of Computer and Programming, B.Sc.</b> , Amirkabir University of Technology (AUT)	Fall 2015

## SKILLS

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<b>Programming Languages</b>	Python, Java, C/C++, R.
<b>Frameworks &amp; Libraries</b>	PyTorch, TensorFlow, Hugging Face, Transformers, NumPy, Pandas, Scikit-learn, Numba, Bitsandbytes.
<b>Data Engineering Tools</b>	SQL, MySQL, MongoDB, Elasticsearch.
<b>DevOps Tools</b>	Docker, Kubernetes, Git, AWS
<b>WebDev Tools</b>	Flask, FastAPI.
<b>Operating system</b>	Linux (Admin level), MacOS, Windows.

## LANGUAGES

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<b>Persian</b> (Native), <b>English</b> (Fluent, TOEFL Score 104).
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