

ZAHRA ABBASIANAEB

 zahra-abbasiantaeb  ZahraAbbasiantaeb  +31(0)626 174 331  z.abbasiantaeb@uva.nl
 Lab 42, Science Park, University of Amsterdam (UVA), Amsterdam.  zahraabbasiantaeb.github.io

RESEARCH INTERESTS

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

EDUCATION

Ph.D. Candidate of Informatics Institute - Information Retrieval Lab (IRLab) 2023 - Present
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 - 2020
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.

RESEARCH EXPERIENCE

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, Jeffrey Dalton, and Mohammad Aliannejadi. “Conversational Gold: Evaluating Personalized Conversational Search System using Gold Nuggets”, (under review).

Maryam Mousavian, **Abbasiantaeb Zahra**, Mohammad Aliannejadi, and Fabio Crestani. “Towards Fair Rankings: Leveraging LLMs for Gender Bias Detection and Measurement”, (under review).

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”, (accepted at CHIIR 2025).

Abbasiantaeb Zahra, Chuan Meng, Leif Azzopardi, and Mohammad Aliannejadi. “Improving the Reusability of Conversational Search Test Collections”, (accepted at ECIR 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, 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, Suzan Verberne and Jian Wang. “Unveiling hidden links: A machine learning pipeline for extracting and matching patent in-text references to scientific publications”, under review of JASIST, 2024.

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, Emiliana, **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

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

ACADEMIC SERVICES

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

INVITED TALKS

Simulation of Conversation, Qazvin Islamic Azad University (QIAU), Iran.

May 2024

TEACHING EXPERIENCE

Information Retrieval 0, B.Sc., University of Amsterdam (UVA)

Fall 2024

Information Retrieval 0, B.Sc., University of Amsterdam (UVA)

Fall 2023

An introduction to Natural Language Processing (NLP), Hamrah Academy

Summer 2021

Information Retrieval and Web Search, M.Sc., Amirkabir University of Technology (AUT)

Fall 2019

Machine Learning, M.Sc., Amirkabir University of Technology (AUT)

Spring 2019

Artificial Intelligence, B.Sc., Amirkabir University of Technology (AUT)

Spring 2018

System Design and Analysis, B.Sc., Amirkabir University of Technology (AUT)

Fall 2016

Advanced Computer Programming, B.Sc., Amirkabir University of Technology (AUT)

Spring 2016

Principals of Computer and Programming, B.Sc., Amirkabir University of Technology (AUT)

Fall 2015

SKILLS

Programming Languages

Python, Java, C/C++, R.

Frameworks & Libraries

PyTorch, TensorFlow, Hugging Face, Transformers, NumPy, Pandas, Scikit-learn, Numba, Bitsandbytes.

Data Engineering Tools

SQL, MySQL, MongoDB, Elasticsearch.

DevOps Tools

Docker, Kubernetes, Git, AWS

WebDev Tools

Flask, FastAPI.

Operating system

Linux (Admin level), MacOS, Windows.

LANGUAGES

Persian (Native), English (Fluent, TOEFL Score 104).