

Contact Information

Email: neginghasemi.t@gmail.com

Homepage: <https://neginghasemi.github.io>

LinkedIn: <https://www.linkedin.com/in/negin-ghasemi>

GitHub: <https://github.com/neginghasemi>

Research and Work Experiences

2023 **Machine Learning Engineer Intern:** Spotify

Experimenting with different LLMs, including GPT and open-source models to enhance and validate a stealth product.

2022 **Visiting Scholar:** IRLab, University of Amsterdam

Developed and refined different aspects of the cross-market question-answering system:

- Designed and evaluating a cross-market, multi-resource system.
- Developed and analyzed an automatic-labeling system for product question answering using GPT-3 and ChatGPT.

2020–Present **PhD Candidate:** Informagus, Radboud University

Working on four major projects focused on modern scenarios in federated search systems:

- Modifying and analyzing various transformer-based rankers such as BERT and T5.
- Developing an app selection system using the ability of transformer-based rankers to model resources and reduce retrieval bias.
- Designing a federated recommender system using neural rankers.
- Designing a cross-market question-answering system.

2016–2020 **Researcher:** NLP Lab, Amirkabir University of Technology (Tehran Polytechnic)

Completed three major projects on state-of-the-art IR and NLP fields:

- Implemented different kinds of document representations, using both pre-trained models and deep neural networks such as LSTM, and GAN.
- Improved a collaborative recommender system about 15% by using different user profiling.
- Led development of an expert finding system, enhanced it by using graph embeddings and text representation profiling.
- Analyzed results and wrote reports on all projects, and publish journal papers.

2017–2020 **Back-End Developer:** Adanic Co.

- Helped build and enhance highly available, scalable, real-time and secure channel manager system for banking transactions using **Java Spring**, **MySQL**, and **MongoDB**.
- Lead development of an analytical dashboard for banking transactions using **Elastic Search**, **Logstash**, and **Kibana**.
- Aided in training of new developers, and support engineers throughout the product lifecycle to produce high-quality software.
- Maintained systems for six different clients using various databases and environments.

2016 **Intern:** AtiNegar Co.

- Implemented a portfolio management system using **Python**.

Education

- 2020–2024 **Doctor of Philosophy, Computing and Information Science (Data Science):**
Radboud University
- **PhD Project:** Knowledge Transfer from Resource-Rich to Resource-Scarce Environments
 - **Promoter:** Prof. dr. Djoerd Hiemstra, and Prof. dr. Arjen de Vries
- 2017–2019 **Master of Science, Computer Engineering (Artificial Intelligence):**
Amirkabir University of Technology (Tehran Polytechnic)
- **Overall GPA:** 18.03/20
 - **Thesis Title:** Expert Finding in Community Question-Answering
 - **Supervisor:** Dr. Saeedeh Momtazi
- 2013–2017 **Bachelor of Science, Computer Engineering (Software Engineering):**
Amirkabir University of Technology (Tehran Polytechnic)
- **Overall GPA:** 17.13/20
 - **Bachelor Project:** Improving Collaborative Filtering Recommender Systems with New User Similarity Model

Publications

- 2023 **Negin Ghasemi**, Mohammad Aliannejadi, Hamed Bonab, Evangelos Kanoulas, Arjen de Vries, James Allan, and Djoerd Hiemstra, "Cross-Market Product-Related Question Answering". In *Proceedings of SIGIR '23, ACM*.
- 2021 **Negin Ghasemi**, Mohammad Aliannejadi, and Djoerd Hiemstra, "BERT for Target Apps Selection: Analyzing the Diversity and Performance of BERT in Unified Mobile Search". In *Arxiv preprint, abs/2109.06306*.
- 2021 **Negin Ghasemi**, and Djoerd Hiemstra, "BERT meets Cranfield: Uncovering the Properties of Full Ranking on Fully Labeled Data". In *Proceedings of the 16th Conference of the EACL: Student Research Workshop*.
- 2021 **Negin Ghasemi**, Ramin Fatourehchi, and Saeedeh Momtazi, "User Embedding for Expert Finding in Community Question Answering". In *Proceedings of ACM Transactions on Knowledge Discovery from Data*.
- 2021 **Negin Ghasemi**, and Saeedeh Momtazi, "Neural Text Similarity of User Reviews for Improving Collaborative Filtering Recommender Systems". In *Proceedings of Electronic Commerce Research and Applications*.

Technical Skills

Languages

Experienced Python, Java, R

Machine Learning Frameworks

Experienced PyTorch, Keras, TensorFlow, Scikit-learn, Hugging Face, LangChain

Databases and Tools

Experienced MTurk, Slurm, MongoDB, PostgreSQL

Familiar with GCP, Vertex AI, Big Query, Elasticsearch, Grafana, FastAPI

Miscellaneous

Experienced Linux, GIT, \LaTeX