SINA BAGHERI NEZHAD

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EDUCATION

PhD in Computer Science (in progress)

Sep 2022 – Dec 2025 (anticipated)

Portland State University

Masters in Computer Engineering - Artificial Intelligence

Sep 2019 - Dec 2021

Iran University of Science and Technology

Masters in Technology Management

Feb 2014 – Feb 2017

University of Tehran

Bachelor in Industrial Engineering

Sep 2007 – Jul 2012

Karaj Azad University

Professional Experience

Graduate Research Assistant

Aug 2023 - Now

Portland State University

- Investigate multilingual model scaling impacts on both seen and unseen languages.
- Research fairness in multilingual QA and summarization, ensuring equitable model performance.
- Develop fair clustering algorithms, contributing to novel approximation solutions.

Graduate Teaching Assistant

Sep 2022 - Now

 $Portland\ State\ University$

• TA for Ethics in AI and Discrete Structures, supporting course delivery and student learning.

Head of Software Development

Sep 2021 - Aug 2022

Basir Andishan Bina Tadbir

- Introduced agile workflows and code review processes, improving efficiency and code quality.
- Configured and optimized Jira, Bitbucket, and Confluence for streamlined project management.
- Mentored team members on best practices, increasing overall productivity and collaboration.

Manager and Founder

Apr 2012 - Mar 2022

ElectroSadaf

- Expanded market share by targeting underserved demographics, driving sustained revenue growth.
- Implemented cost management and differentiation strategies, discovering "blue ocean" opportunities.
- \bullet Built strong customer relationships, enhancing long-term client retention.

Researcher Sep 2020 - Apr 2021

Data mining lab @ Iran University of Science and Technology

- Developed multilingual retrieval methods for Arabic-Persian corpora using Elasticsearch.
- Implemented search suggestion techniques leveraging user behavior patterns.

Graduate Teaching Assistant

Sep 2020 - Fab 2021

Iran University of Science and Technology

• TA in Neural Networks, assisting with lab sessions and student evaluations.

Earlier Teaching Roles Various Institutions

2010 - 2017

• Supported courses in Non-parametric Statistics, Operations Research, and Engineering Statistics.

Planning and Project Control Expert

Apr 2016 - Jul 2016

GS1 Iran

• Analyzed and controlled development of solutions following international GS1 standards.

Publications

Constant-Approximation Algorithms for Fair Sum-of-Radii Clustering

Under-review

Sina Bagheri Nezhad, Sayan Bandyapadhyay and Tianzhi Chen

The Impact of Model Scaling on Seen and Unseen Language Performance Rhitabrat Pokharel, Sina Bagheri Nezhad, Ameeta Agrawal and Suresh Singh 2025

2025

The First Workshop on Scalable and Efficient Artificial Intelligence Systems (SEAS) @ AAAI 2025

Beyond Data Quantity: Key Factors Driving Performance in Multilingual Language Models

Sina Bagheri Nezhad, Ameeta Agrawal and Rhitabrat Pokharel

The First Workshop on Language Models for Low-Resource Languages @ COLING 2025

2024

Fair Summarization: Bridging Quality and Diversity in Extractive Summaries

Sina Bagheri Nezhad, Sayan Bandyapadhyay and Ameeta Agrawal

2024

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Algorithmic Fairness through the Lens of Metrics and Evaluation @ NeurIPS 2024

Evaluating Multilingual Long-Context Models for Retrieval and Reasoning

2024

Ameeta Agrawal, Andy Dang, Sina Bagheri Nezhad, Rhitabrat Pokharel and Russell Scheinberg The 4th Multilingual Representation Learning (MRL) Workshop @ EMNLP 2024

What Drives Performance in Multilingual Language Models?

2024

Sina Bagheri Nezhad and Ameeta Agrawal

The Eleventh Workshop on NLP for Similar Languages, Varieties and Dialects (VarDial 2024) @ NAACL 2024

Exploring the Maze of Multilingual Modeling

2023

Sina Bagheri Nezhad and Ameeta Agrawal

arXiv preprint arXiv:2310.05404

Smoking prevalence in Covid-19 patients

2021

Sina Bagheri-Nezhad, Nasser Mozayani, Elham Abdi, Setareh Rostami ar
Xiv preprint ar Xiv:2107.13599 $\,$

Investigation of the smoking prevalence among critically ill patients with COVID-19

2021

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Sina Bagheri-Nezhad, Elham Abdi, Nasser Mozayani, Marzieh Mehrafza Journal of Control 14 (5), 33-37

Professional Involvement

- Reviewer: Computational Intelligence, EMNLP 2023, COLING 2024, CALDAM 2024, and other conferences.
 - PC Member: SustaiNLP @ ACL 2023

Certificates

- Deep Learning Specialization (deeplearning.ai)
- Reinforcement Learning Specialization (University of Alberta & amii)
- TensorFlow Developer Professional Certificate (deeplearning.ai)

TECHNICAL & COMMUNICATION SKILLS

- Programming: Python
- NLP & ML Libraries: PyTorch, TensorFlow, Hugging Face, Scikit-learn
- Data Analysis: Numpy, Pandas, SciPy, Matplotlib, Plotly
- Tools: Git, Jira, Bitbucket, Confluence
- Languages: English, Persian

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