

EDUCATION

M.Sc. By Research, Information Technology (IT), Tarbiat Modares University of Tehran, Iran

- **Thesis Title:** A Method to Build Data-Driven Ontology for Tourism Recommender Systems
- Graduated with distinguished degree
- GPA: 17.74 out of 20 (above 88%)

B.Sc. Industrial Engineering, Karaj Azad University, Karaj, Iran

Non-Academic Programs:

- Deep Learning, Professor Andrew Ng, Coursera, By Certification
- Principles of Machine Learning, Microsoft Professionals AI Programs, EDX.org, Free Participant
- Essential Mathematics for Artificial Intelligence, Microsoft Professionals AI Programs, EDX.org, Free Participant
- Intro to Computer Science, Udacity.com, Free Participant

WORK EXPERIENCE

(May 2019-Present) Freelancer Software Engineering

Together with a team, I am doing various projects, including sentimental analysis, topic modeling, building web applications powered by AI, Crawling and analyzing data from social networks, designing deep learning models with flask backend and API. Currently, I am part-time involved in two projects related to the design of chatbots and satellite image classification. In both of these projects, I am responsible for designing REST APIs with Flask and deep learning models.

(February 2019- March 2019) DTScientist Company

As a python programmer Developed Python codes for a startup company which could crawl and scrape particular websites data that needs to solve CAPTCHA code

(April 2019- June 2019) BabyPro Company

As a data scientist raised the effectiveness of BabyPro company marketing, comments of competing companies in Instagram extracted and by using Social Network Analysis effective persons based on their centrality and betweenness in the network identified

(October 2018- December 2018) Data Science researcher in the Research Department of Tarbiat Modarres University

Employed text mining techniques, extracted research clusters from Tarbiat Modarres University based on 5,000 Papers, and compared them with the research fields they intend to carry out in their future studies. also examined the research areas of interest of the professors and their relevance.

HONORS & AWARDS

- M.Sc. Thesis received and accepted with perfect score (18 of 18)
- Top-ranked among more than 10000 participants in national exam
- The best research report for the artificial neural network design course and getting a full grade. The Director of Information Technology Group praised the research.

Technical SKILLS

Programming/Scripting Languages

- Python(advance): Implementing machine learning Packages, working with the mathematical operations, loading and manipulating data, scrapping and crawling web data
- JavaScript (Intermediate), write function, method, and objects, Implementing TensorFlow.js in Browser

Web/DB Technologies

- React
- HTML, CSS3, JavaScript and SQL
Developing progressive web applications powered by Machine Learning algorithms

Operating Systems

- Linux, Windows

Tools/Software

- Numpy, Pandas, Scipy, ScikitLearn, TensorFlow, Keras, Matplotlib

Other Technical Skills

- Git/GitHub: Clone, Fork, Push, Pull
- Latex: Paper Writing (Personal Choice: Overleaf)
- Microsoft Office: Excel, Word, Power Point

RESEARCH INTERESTS

- Recommender Systems, algorithm's bias and fairness curation - experimental design
- Natural Language Processing and Text Mining applications in Social Network Analysis
- Machine Learning and Knowledge Discovery Application in Decision Making, Special in Clinical Process
- Word Embeddings and their effects on Downstream Tasks

Volunteer Experience

(Dates 2018 – To Present) Data Mining Consultant at Tarbiat Modares University

Help students who will start the writing of the final assignment confused what to do. for example:

- Determine the title of the writing material
- What will be written (the problem that will be raised)
- Qualitative or quantitative research
- Search for book references (Libraries sometimes don't exist)
- And so forth.

Teaching Experience

- Python Application in Data Science (Data Mining Course)
- Web scraping and crawler bots with BeautifulSoup and Selenium (Workshop)
- Teaching mathematics to high school students

HOBBIES

- Playing classical guitar and composing music
- Web/WebApp Design
- Mountain Climbing
- Reading novel books (crazy about Gabriel García Márquez)

PUBLICATIONS

Preprint (consider as writing sample)

- **Norouzi, Rasoul**, Hamed Baziyad, Elham Akhondzadeh, and Amir Albadvi. "A Method to Build Data-Driven Ontology for Tourism Recommender Systems “submitted to Expert Systems with Applications” [[Pre-Print version Link](#)].

Published

- Seyed mohammad Reza Hosseini, Hamed Baziyad, **Rasoul Norouzi** and et.al "Mapping the intellectual structure of GIS-T field (2008–2019) A dynamic co-word analysis." *Scientometrics* (2021) [[Full Text](#)]
- Baziyad, Hamed, **Rasoul Norouzi**, and Amir Albadvi. "Mapping the Intellectual Structure of the Internet of Things (IoT) Field Based on Web Content: A Co-word Analysis." 4th International congress of Electrical, Computer and Mechanical Engineering. [[Full text](#)]
- Baziyad, Hamed, Saeed Shirazi, Seyed mohammad Reza Hosseini, and **Rasoul Norouzi**. "Mapping the intellectual structure of epidemiology with use of co-word analysis." *Journal of Biostatistics and Epidemiology* (2019). [[Full text](#)]

Presentation

- Recipe to Classify, Case Study: [DA 2016 Challenge](#) [[En Presentation](#)]
- LSTMs and Standard recurrent Neural Networks Survey Report, get Perfect score, [[English-Presentation](#)]
- Machine Learning Application in Biomarker Discovery for Cancer Detection, highly praised by the IT faculty, [[Farsi-Presentation](#)]
- Introduction to the math behind word2vec and its implementation with TensorFlow

Master Thesis: A Method to Build a Data-Driven Ontology for Tourism Recommender Systems
“A new method based on ontology and multilabel classifiers proposed and tried to solve these systems' cold start and matrix sparsity problems. Also, I show a slight advantage in predicting users' interests compared to collaborative filtering models”. [[English-Summarized Version](#)]

REFERENCES

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