Reza Nouralizadeh Ganji

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Education

Master of *Artificial Intelligence* 2020 – 2023
K. N. T. University of Technology Tehran, Iran

- ***Notable Courses:*** Natural Language Processing, Neural Networks, Recommender Systems, Information Retrieval, Evolutionary Computation
- ***Thesis:*** Sentiment Analysis of Short and Incomplete Text using Transformers and Attention Mechanism; under supervision of *Dr. Chitra Dadkhah*
- ***Thesis Grade:*** (20/20 – 4/4)
- ***GPA:*** (18.32/20 – 3.88/4)

Bachelor of *Computer (Software) Engineering* 2017 – 2020
Shomal University Amol, Iran

- ***Notable Courses:*** Machine Learning, Artificial Intelligence, Algorithm Design, Data Structures, Formal Languages and Automata Theory, Engineering Probability and Statistics
- ***Thesis:*** A machine learning-based model for spam detection on mobile phone short message service (SMS); under supervision of *Dr. Hamidreza Koohi*
- ***Thesis Grade:*** (20/20 – 4/4)
- ***GPA:*** (17.61/20 – 3.44/4)

Research Interests

- Natural Language Processing
- Deep Learning
- Machine Learning
- Information Retrieval
- Sentiment Analysis
- Computational Linguistics

Skills

Programming: Skilled in Python, Familiar with: PHP, HTML, CSS
Deep Learning: Transformers, Attention mechanisms, Recurrent Neural Network (RNN), Long Short Term Memory (LSTM), Gated Recurrent Unit (GRU), Auto Encoders
Machine Learning: Clustering, Decision Tree, Support Vector Machine (SVM), Multi-Layer Perceptron (MLP), Ensemble Models, Logistic Regression
AI Packages: Pytorch, Numpy, Pandas, Matplotlib, WandB, PLotly, Scikit-learn
Languages: Persian (Farsi), English
Industry Knowledges: Documentation, Presentation

Work Experience

SEO Specialist April 2018 – October 2019
Nooshika Corp. Babol, Iran

- Producing new content for online publications that addresses the needs of a specified demographic.
- Provide developers and content creators with technical advice on how to improve the performance of web pages.
- Keeping up to date with developments requires constant monitoring of the algorithms that are used by search engines.

LICENSES & CERTIFICATIONS

Natural Language Processing Specialization Coursera
Younes Bensouda Mourri, Łukasz Kaiser February 2022

- In this four-course specialization, students learn how to construct applications for NLP activities including question answering and sentiment analysis, and how to create translation, summarization, and chatbot tools.
- ***Credential ID:*** LCKQELFDBRYW

Deep Learning Specialization Coursera
Andrew NG, Kian Katanforoosh, Younes Bensouda Mourri December 2021

- The five courses in this specialization educate students how to design, develop, and optimise CNNs, RNNs, LSTMs, and Transformers utilising Dropout, BatchNorm, Xavier/He initialization, and other approaches.
- ***Credential ID:*** K8PGAYP9BUZC

PUBLICATIONS

Improving Sentiment Classification for Hotel Recommender System Published
***Ganji, R.N.**, Dadkhah, C., Tohidi, N.* 2023

- Ganji, R.N., Dadkhah, C. and Tohidi, N., 2023. Improving Sentiment Classification for Hotel Recommender System through Deep Learning and Data Balancing. Computación y Sistemas, 27(3), pp.811-825.

PAMR: Persian Abstract Meaning Representation Corpus Published
*Tohidi, N., Dadkhah, C., **Ganji, R.N.**, Sadr, E.G., Elmi, H.* 2024

- Tohidi, N., Dadkhah, C., Ganji, R.N., Sadr, E.G. and Elmi, H., 2024. PAMR: Persian Abstract Meaning Representation Corpus. ACM Transactions on Asian and Low-Resource Language Information Processing, 23(3), pp.1-20.

Sentiment Analysis of Short and Incomplete Text Submitted
***Ganji, R.N.**, Dadkhah, C.* 2024

- Ganji, R.N., Dadkhah, C. (2024). Sentiment Analysis of Short and Incomplete Text using Transformers and Attention Mechanism.

SELECTED PROJECTS

Sentiment analysis on twitter tweets about COVID-19 vaccines Spring 2021
</> *Python*

- A model for doing sentiment analysis on tweets pertaining to COVID-19 vaccinations was formulated by combining a bio-inspired Cuckoo Search (CS) optimisation algorithm with a K-means clustering method.

Search engine for Persian poems Fall 2020
</> *Python*

- Using the Whoosh Python package to create a search engine for Persian poems. The resulting search engine would be able to index large quantities of structured texts and return relevant results based on the user's query.

Spam detection with machine learning-based model Winter 2020
</> *Python*

- Building a model for determining if a mobile short message is a spam or not was the goal of this research project. The constructed model uses the naive Bayes and bag of words algorithms, which both produce accurate and efficient results.

CONFERENCES & PRESENTATIONS

Neural-based approaches for sentiment analysis February 2022
KNTU University Master's Research Seminar

Applications of Monte Carlo sampling in data mining June 2021
KNTU University Data Mining's Research Seminar

Bio-Inspired algorithms for sentiment analysis May 2021
KNTU University Evolutionary Computation's Research Seminar

How do search engines use machine learning methods? May 2019
Shomal University Artificial Intelligence's Research Seminar