

Elham Amini

EDUCATION

Master of Science in Information, Data Science | University of Michigan, MI, USA | GPA: 4.0/4.0 12-2021

Relevant Coursework: Data Mining, SQL and Databases, Information Retrieval, Machine Learning, Information Visualization, Natural Language Processing, Deep Learning

Master of Business Administration (MBA) | Alzahra University, Tehran, Iran | GPA: 3.8/4.0 2018

Relevant Coursework: Statistical Analysis, Management Information System

Bachelor of Science in Mechanical Engineering | IUST, Tehran, Iran 2012

SKILLS

Programming Languages: Python [Pandas, Numpy], SQL, R

Machine Learning and Deep Learning Libraries: Tensorflow, PyTorch

Visualization Libraries / Tools: Altair, Tableau

Information Retrieval and NLP Libraries: Gensim, NLTK, rank_bm25, Hugging Face

INTERNSHIP EXPERIENCE

Data Science Intern | UHG | San Francisco (Remote) May. 2021 - Aug. 2021

- Conducted an end-to-end machine learning and causal inference model on observational data to predict the effectiveness of the marketing campaigns on each individual customer (A/B Test)
 - performed feature selection on over 1000 sparse features using f-statistics; compared two-model approaches, class transformation, solo models, and selected the best performing model with AUC 0.78
 - Improved the campaign effectiveness by targeting only the top 20% of users
 - proposed the end-to-end productization plan based on MLflow to marketing stakeholders; publishing the model API to the downstream consumers
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SELECTED CLASS PROJECTS

NLP | University of Michigan Winter 2021

- Fined tuned a transformer language model (GPT-2) to generate lyrics
- Built a classification model using BERT to detect whether a song is machine-generated or not with 85% accuracy

Information Retrieval | University of Michigan Winter 2020

- Designed and built a vertical search engine using Python
- Used Beautiful Soup to scrape the data and designed SQL databases to store the data
- Used TF-IDF metric and bm25 function to retrieve and rank the most relevant documents
- Implemented the graphical user interface using Python and False

Applied Machine Learning | University of Michigan Fall 2020

- Trained and tuned multiple ML models to predict the temperature of Trout lake for one year
 - Reached an MSE of 0.022 by training a linear regression algorithm with feature expansion
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VOLUNTEER ACTIVITIES

Vice President, “Student Organization for Data Analytics”, University of Michigan Fall 2020