Morteza Mogharrab

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Skills

Technical Skills:

Data Collection / Cleaning / Manipulation Visualization / Storytelling, Data Analysis (EDA), Model Building / Evaluation, Coding, Agile, Scrum, inclusive design

Toolkits:

Pandas, NumPy, Scikit-Learn, PyTorch, NLTK, Seaborn, Plotly, Tableau, SQL, AWS, HTML5, CSS3 (SASS), JavaScript Git/GitHub, Adobe Collection, VS Code, Anaconda, Microsoft - Office, Prompt Engineering

Competencies:

Problem Solving, Critical Thinking, Creative Thinking, Teamwork, Time Management, Adaptability to New Challenges, Social Intelligence, Leadership, Public Speaking

Certificates

LinkedIn Learning Paths:
- Advance Python Skills for Data Science
- Advance Skills as a Python Data Expert
- Advance Your Skills in Python
- Recommender Systems with ML&AI
- Become a Front-End Web Developer
- Become an AWS Cloud Practitioner

Presentations
- Web Accessibility
- Software Production challenges
- Novel Data Science case studies

Volunteer
- Google Map local Guider
- Musician - Event Assistant/Coordinator (Local Charities and music meetups)

Hobbies

Photography, Piano and Synthesizer, Travel, Sketching, Podcast Listening

Education

Master of Computing Science (Multimedia)
University of Alberta, Edmonton, Canada. 2023 – 2025, GPA (4 / 4)

Courses: AI in Multimedia, Image and Video Processing, Virtual Reality and Telepresence, Multimedia Communication, Computer Vision and 3DTV, Graphics and Animations

Academic Projects

Arbitrary Style Transfer
- A comprehensive exploration of widely-known CNN-based Arbitrary Style Transfer models (VGG19 and ResNet34), trained on the ImageNet dataset.

Movie Recommender System
- Explored collaborative filtering, SVD, and K-NN algorithms, together with RMSE, ARHR, etc. evaluation metrics using Movie-Lens datasets, Scikit-learn, and Surprise libraries. Searched on Apache Spark, Hadoop, Multi-Modal Dual-GNN, and Cloud services in large-scale systems like TikTok.

Text Summarizer
- Coded a GUI-based extractive summarizer using Glove vectors, TextRank algorithm, and Cosine similarity approach by NLTK, Pandas, NumPy, and Tkinter Python libraries.

Sentiment Analysis of Amazon Food Comments
- Utilized TextBlob, BERT, and VADER to extract polarity and subjectivity of 500 thousand published reviews, along with testing Aylien, MonkeyLearn APIs, and AWS Comprehend free tier.

Stock Market Visualization Dashboard
- Developed a real-time data visualization application using React.js, Plotly.js, and RESTful API, providing detailed information on top tech stocks through various chart types.

VR Training for Factory Robot Repair
- Developed a Meta-Quest-3 app in Unity 3D, including haptic feedback, clear text instructions, 3D spatial audio, and high-quality assets, as well as conducting usability tests for better UX.

Work Experience

Freelancer Multimedia Developer - Analyst
June 2020 - June 2022, Tehran-Iran
- Enhanced business performance across e-commerce, social media, and manufacturing domains using advanced analytical techniques, resulting in significant customer retention improvements and informed decision-making.
- Developed several dynamic/static web products for various domains using HTML, CSS, JS, and CMSs.
- Designed graphic packages utilizing Adobe Collection.