Phone: (780) 238-2524
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### Skills

#### Technical Skills:

Data Collection / Cleaning / Manipulation Visualization / Storytelling, Exploratory Data Analysis (EDA), Model Building / Evaluation

#### Toolkits:

Pandas, NumPy, Scikit-Learn, NLTK, Matplotlib, Seaborn, D3.js, Tableau, SQL PyTorch, Scikit-image, OpenCV, AWS HTML5 (Living Standard), CSS3 (SASS), Git/GitHub, Microsoft Excel, Prompt Engineering

#### Competencies:

Problem Solving, Critical/Creative Thinking, Teamwork, Time Management, Adaptability to New Challenges, Social Intelligence

#### 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 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, Web Surfing.

# Morteza Mogharrab

#### Education

# Master of Computing Science (Multimedia)

University of Alberta, Edmonton, Canada. 2023 – 2025, GPA (4 / 4)

Courses: Al 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

- Implemented filtering and Machine Learning algorithms (Collaborative, SVD, k-NN) on Movie-Lens datasets using Scikit-learn and Surprise Python libraries.
- Evaluated accuracies with RMSE and ARHR metrics.
- Explored Apache Spark, Hadoop, Multi-Modal Dual-GNN, and Cloud services in recommender systems of TikTok, Instagram, YouTube, and Amazon.

#### **Text Summarizer**

 Coded an extractive summarizer based on Glove vectors, the TextRank algorithm, and the Cosine similarity approach, using NLTK, Pandas, NumPy, and Tkinter python libraries, in which users can select a text file, put the number of final summarized sentences they want, and print the summarized text.

#### Sentiment Analysis of Amazon Food Comments

- Extracted polarity and subjectivity of 500 thousand published comments, Using TextBlob, Pandas, and Matplotlib Python libraries.
- Tested Aylien and MonkeyLearn APIs in RapidMiner and AWS Comprehend free tier as no code alternatives.

# Work Experience

# Freelancer Data Analyst – Web Developer

June 2021 - June 2022, Tehran-Iran

- Transformed data insights into practical recommendations to enhance the performance of a private agency. Activities encompassed data manipulation, development of predictive models, visualization, and effective communication.
- Developed several dynamic/static web products for various domains using coding technologies such as React.js and CMSs such as WordPress and Drupal.