Phone: (780) 238-2524
Email: mogharra@ualberta.ca
LinkedIn: /morteza-mogharrab
Website: morteza-mogharrab.github.io

**GitHub:** github.com/morteza-mogharrab

Behance: /morteza-mogharrab

#### Skills

#### Technical Skills:

User Research, Inclusive Design, Visual Design, Data Collection, Data Cleaning, Data Manipulation, Exploratory Data Analysis (EDA), Model Building, model Evaluation, Data Visualization, Data Storytelling, Requirements Analysis, Testing, Debugging, Agile, Scrum

#### Toolkits:

HTML5 (Living Standard), CSS3 (SASS), Bootstrap5, JavaScript, SQL, Git/Hub, AWS Python (Pandas, NumPy, Scikit-Learn, PyTorch, NLTK, Matplotlib, Seaborn), D3.js, Tableau, PowerBI, Adobe Collection VS Code, Sublime Text, Anaconda, Unity 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:**

- Become a React Developer
- Become a Front-End Web Developer
- Advance Skills as a Python Data Expert
- Recommender Systems with ML&AI
- Become an AWS Cloud Practitioner
- Advance Python Skills for Data Science
- Advance Your Skills in Python
- Become an Interaction Designer
- Become a Digital Marketing Specialist
- Microsoft Project Essential Training

# 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

## Bachelor of Computer Engineering (IT)

Azad University (IAU), Tehran, Iran. 2015 - 2019, CGPA (3.4 / 4) CGPA of last 50 specialized units (4 / 4) - Obtained a term GPA of over 3.5/4 for 5 semesters

# **Academic Projects**

## VR Training for Factory Robot Repair

- Developed a Meta-Quest-3 VR application, designed for immersive troubleshooting within a virtual factory populated with robots.
- Implemented advanced features including haptic feedback, clear text instructions, 3D spatial audio, and high-quality assets to elevate the overall UX. Ensured the app's effectiveness by conducting usability tests to validate clarity, simplicity, and efficiency in the interface.

## Playland Ticketing System

 Developed an OOP program with Python in which users can choose from 16 different Tickets through a GUI consisting of images, prices, a calculator, and several buttons such as printing the receipt.

# Arbitrary Style Transfer

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

## Sentiment Analysis of Amazon Food Comments:

- Utilized various Python libraries and tools, including TextBlob, BERT transformers, and VADER, to extract polarity and subjectivity from a dataset of 500 thousand published reviews.
- Tested Aylien and MonkeyLearn APIs in RapidMiner and AWS Comprehend free tier as no code alternatives.

## 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.

### Presentations

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

## International certificates:

- IELTS Academic: Overall 7.0 (L:7.5 R:7.5 S:6.5 W:6.5)
- GRE General: Overall 305 (Q:160 – V:145 – AWA:3.5)

#### Volunteer

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

#### Honors

- Title: The distinguished student among Computer Engineering students. Islamic Azad University of Roudehen. 2016
- Title: 1st place in Synthesizer playing competition. Irani3an keyboard player associations. Sept 2017
- Title: 3rd place in piano playing competition. Tehran counties music competitions July 2014
- Ranked in top %15 of the national university entrance exam. Aug 2015
- 1st place of Swimming competition.
   District 12, Tehran. Sept 2010
- Title: 1st place in piano playing competition. Roudehen City music competitions Nov 2013
- Title: 1st place in Solo playing and Solo singing competition. Roudehen City music competitions Dec 2014

#### **Hobbies**

Piano and Synthesizer, Photography Travel, Sketching, Podcast Listening, Web Surfing.

## 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.

## Prompt Engineering Use-cases

- FemmeVision: Empowering Beauty Through AI: Explored potential professional applications of Text-to-image models regarding character creation.
- Unleashing Infinite Design Concepts through Generative AI Models: Showcased the immense potential of generative AI models to transform the design landscape, empowering designers and individuals alike to unleash boundless creativity and bring their unique visions to life.

## **Work Experience**

## Freelancer Web Developer, Data Analyst

June 2021 - June 2022, Tehran-Iran

- Developed several dynamic/static web products for various domains using coding technologies such as React.js and CMSs such as WordPress and Drupal.
- Analyzed and monitored e-commerce websites and social media platforms using services such as Google Analytics, leading to customer retention boosts.
- 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.

### Freelancer Designer

June 2020 - June 2022, Tehran-Iran

- Designed UI / UX packages utilizing Adobe software collection.
- Designed several weekly marketing and social magazines using Adobe InDesign and edited multiple vlogs using Adobe Premier and After Effects.

# Sales and Marketing Manager

Part-time, May 2015 - Oct 2022, Mogharrab Bag Industries-Tehran-Iran

- Overseed sale operations for our family business in the field of bag industries.
- Undertook market research to create marketing strategies, make budget plans, and understand the trends and customer preferences in order to increase business sales.