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Skills

Technical Skills:

Requirements Analysis, System Architecture, Algorithm Design, Testing / Debugging, Database Management, Agile / Scrum

Toolkits:

HTML5 (Living Standard), CSS3 (SASS), Bootstrap5, JavaScript, C/C++, Unity (C#), Python, Assembly, SQL, Git/Hub, AWS, Web Accessibility, Microsoft Office, Adobe Collection, Prompt Engineering

Competencies:

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

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

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

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

Morteza Mogharra

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

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.

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.

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.
- 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.