Darius Mahjoob

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EDUCATION

University of Southern California, Viterbi School of Engineering

GPA: 3.9/4.0

Bachelor of Science in Computer Science and Business, Minors in AI Applications, Cybersecurity Master of Science in Electrical Engineering (emphasis in Machine Learning) August 2023-May 2027 January 2026-December 2027

Honors: Presidential Merit Scholarship, Dean's List (4x), Academic Achievement Award (3x)

Relevant Coursework: Software Engineering, Data Structures, Algorithms, Object-Oriented Programming, Computer Systems

SKILLS AND INTERESTS

Languages: (advanced) Python, Java, C++, (intermediate) Ruby, SQL, JavaScript, HTML/CSS, YAML, R

Certifications/Training: Google Ads Certification, PWC Consulting Externship, Agile (Scrum)

Developer Tools: Git/GitHub/GitLab, Docker, Postman, kubernetes, MySQL, PostgreSQL, AWS Services **Libraries & Frameworks:** TensorFlow, Keras, PyTorch, pandas, Matplotlib, NumPy, Sci-Kit Learn, Flask

EXPERIENCE

DrFirst, Inc.

Remote, USA

Data Engineering & Machine Learning Intern

June 2025-August 2025

- Automated an ETL pipeline for 53 pharmaceutical brands, integrating AWS S3, Lambda, and QuickSight to visualize perscription analysis data and reduce manual processing time by >90%.
- Implemented an LSTM neural network to model and forecast brand-level data growth based on historical data.

University of Southern California, Viterbi School of Engineering

Los Angeles, CA

Teaching Assistant: Neural Networks, Data Structures, Algorithms, Machine Learning, Data Mining

December 2024-Present

- Host office hours on AI model development in TensorFlow, data normalization/preprocessing/fine-tuning/evaluation in pandas.
- Teach Python frameworks for data analysis, model development, web application creation, and data scraping.

USC Interactive Collaborative & Autonomous Robotics Lab (ICAROS)

Los Angeles, CA

Undergraduate Student Researcher - Machine Learning

November 2024-Present

- Built a variational autoencoder to analyze the impact of LLM-generated synthetic data in reinforcement learning applications.
- Preprocessed and cleaned data using Sentence-BERT to categorize inputs, optimizing model accuracy by 36%.

Captis Intelligence

Remote, USA

Software Development Engineer Intern

President & Director of Client Relations

June 2024-August 2024

- Wrote a Python program to increase a chatbot's ability to comprehend user queries by 25% within the Captis database.
- Transformed a pre-trained LLM to generate efficient SQL queries from a dataset of over 5 million prompts.

LEADERSHIP & PROJECTS

Avenues Consulting Group

Los Angeles, CA

August 2023-Present

- Direct 50+ consultants across 8 departments to ensure project quality, achieving a 43% increase in client partnerships.
- Lead client-facing engagements with 30+ organizations to host semester-long, student-run consulting projects.
- Develop data-driven consulting frameworks using Power BI to reduce client costs by 25% and boost brand visibility.

Center for Artificial Intelligence in Society | *Python, GitHub, pandas, Sci-Kit Learn, TensorFlow, Keras Project Lead & Machine Learning Researcher*

Los Angeles, CA August 2023-Present

- Lead a 5-member research team investigating screen-time data for student mental health to advance digital well-being.
- Implement encoder-decoder architectures for detecting hate speech in multimodal content to improve content moderation.
- Complete an advanced AI curriculum on classical machine learning and deep neural networks to bolster technical proficiency.

Pokémon Desolation, Azure, Rejuvenation, & Reborn | C++, Ruby, Python, GitHub, RPGMakerXP

Remote, USA

Head Developer & Lead Composer

August 2020-Present

- Design and produce several functional Pokémon games, incorporating 5000+ custom sprites, 300+ maps, 1600+ events, enemy AI algorithms, and original gameplay mechanics to enhance player experience.
- Achieved over 1 million downloads and composed 100+ original musical tracks implemented throughout the games

Meeting Transcription Discord Bot | Python, Pycord, Google Speech-to-Text API, Groq API, FFmpeg

February 2025

- Developed a Discord bot to automatically record, transcribe, and summarize virtual meetings.
- Introduced customizable input dictionaries, enabling users to tailor AI summarization to project-specific terminology.

ML Stock Prediction Model | Python, ARIMA Neural Networks, TensorFlow, Keras, Yahoo Finance

December 2024

- Designed a deep learning model using Python and TensorFlow to predict stock trends, increasing prediction accuracy to 71%.
- Built a Flask web interface for real-time stock visualization, ensuring seamless user interaction and data accessibility.