Ahmad Khan

Education

University of California, Los Angeles

Sep. 2022 – June 2026

Bachelor of Science in Statistics and Data Science, Computational Biology

Los Angeles, CA

Relevant Coursework

- C++ Programming
- Comp Bio Research
- Probability Theory
- Data Analysis

- Data Structures
- Stats for LifeSci
- R Programming

• Mathematical Stats

Data Analysis Experience

Visual Intelligence Lab

Aug. 2024 – Present

Research Assistant

Los Angeles, CA

- Researched and implemented a recurrent neural network using TensorFlow to create a machine learning model that can categorize names by their origin.
- Assisted in collecting and labeling data for GE Aerospace to assist in the ECOLE artificial intelligence project.
- Read and presented research papers to the lab group on a weekly basis, learning more about current research in machine learning such as scene graph implementation and other topics in computer vision.

National Student Data Corps

Aug. 2024 - Present

Project Member

Los Angeles, CA

• Built a sentiment analysis model to categorize positive and negative reviews using PyTorch and RNNs, refining model accuracy with additional training data.

Dong Lab June 2024 – Present

Research Assistant

Los Angeles, CA

- Conducted in-depth analysis of microbiome datasets using ggplot2 package in R to visualize bacterial composition across samples, presenting findings in weekly lab meetings.
- Scripted complex data cleaning and statistical tests to interpret microbiome diversity and its relationship to host health, contributing key insights to lab publications.

Personal Projects

Clothing Category Classification with CNN | Deep learning, Python, Google Colab

November 2024

- Developed a Convolutional Neural Network (CNN) model to classify images of clothing into categories such as shirts, pants, dresses, and shoes. The project involved preprocessing image data, training the CNN, and evaluating the model accuracy.
- Used TensorFlow and Keras for building and training the CNN model, Python for scripting, Matplotlib for visualization of results, and PIL for image processing.
- Learned advanced image processing techniques in Python and how to effectively visualize model training performance to tweak hyperparameters for optimal results.

Technical Skills

Languages: Python, R, C++, SQL Tools: VS Code, XCode, Tableau, Excel Technologies/Frameworks: Linux, GitHub

Work Experience

UCLA Library

June 2023 - Present

 $Student\ Assistant\ 3$

University of California, Los Angeles

- Assist patrons with finding research papers, articles, and books and train new hires.
- Shelve and organize the stacks to keep books organized and work around 15 hours a week overall.

Volunteer Experience

Matricuate

Aug. 2022 - Present

Advising Fellow

University of California, Los Angeles

• Provide guidance on college apps through essay editing and scholarship search, fostering confidence for applicants.

Hunger Project

Aug. 2022 - Present

Volunteer

University of California, Los Angeles

Organize and distribute hygiene kits to houseless communities and prepared meals in shelters.