

EDUCATION

Carnegie Mellon University: Master of Information Systems Management **August 2023 — December 2024**

- *Relevant Courses:* Database Management, Object Oriented Programming in Java, Statistics for IT Managers, Distributed Systems, Machine Learning with Large Datasets, Operations Research, DevOps and Continuous Methods, Agile Methods
- *Current GPA:* 3.89

Lahore University of Management Sciences: Bachelor of Science in Computer Science **September 2016 — December 2020**

- *Relevant Courses:* Machine Learning, Applied Probability, Computer Vision, Artificial Intelligence, Advanced Programming, Software Engineering, Computer Networks, Operating Systems

University of Wisconsin - Stout: Exchange Semester in Computer Science **January 2019 — May 2019**

TECHNICAL SKILLS

Languages/Software	Python, R, Java, C++, Haskell, Golang, JavaScript (Node and Vue), MySQL, PostgreSQL
Tools/Libraries	NumPy, Pandas, Spark, Ggplot2, PyTorch, Tensorflow, OpenCV, Keras, OpenCV, Databricks, AWS EMR

EXPERIENCE

Afiniti
Data Scientist II - AI Production **February 2022 — June 2023**
Data Scientist I - AI Production **January 2021 — January 2022**

- Optimized revenue in large enterprises through statistical and machine learning models based on enterprise and third-party data. The process included in-depth analysis of data comprising aspects of data mining, predictive analysis, probability and statistics, knowledge discovery, descriptive analysis, and automation and improvement of data pipelines.
- Created models that generated an incremental revenue of 5 times the Afiniti target based on the ongoing and historical statistical trends in agent and customer behaviour.
- Led AI and Data Analytics team responsible for optimizing revenue of 2 significant European clients, NOS Portugal and Mamsovil Spain.
- Interviewed and assessed prospective data scientists for technical skills and domain expertise.
- Worked on a project to assign propensity scores to real time data for categorization at runtime using Pandas, SMOTE and Random Forest models. A new pipeline was developed to use these scores at runtime. The Afiniti model efficiency increased by 1.5x and generated 3 times of usual Afiniti revenue.

LUMS
Teaching Assistant - CS 501 Applied Probability **September 2020 — December 2020**

- Conducted tutorials, provided assistance to the class of 150 undergraduate and graduate students and executed their graded components.

ACADEMIC PROJECTS

Analysis of Wikipedia Dataset on Remote Cloud Servers **Spring 2023**

- Developed a Data Analysis pipeline that analyses Wikipedia dataset and executes in multiple environments. Terraform was employed to orchestrate and manage virtual machines on cloud. Data pre-processing and analysis were performed using test-driven development in JUnit, python and bash scripting.

Gender Classification and Speaker Recognition **Fall 2020**

- Performed Gender and Speaker Classification on a dataset of 1500 voice recordings belonging to 150 different speakers. Logistic Regression, Neural Networks and Gaussian Naïve Bayes were all separately used for implementation. The baseline accuracy was improved by 80 percent.

Traffic Surveillance System **Fall 2020**

- The system works on live and recorded videos. The top views were generated using homography and then were stitched together. Object detection was done using Convolutional Neural Networks and YOLO.

E-commerce Web Application **Spring 2020**

- Developed a Django based ecommerce web application for a clothing startup. The backend was designed in SQLite and Django while the front end was a blend of React and Bootstrap. Sentiment Analysis was incorporated for admin dashboard to analyze customer reviews.

HONOURS & LEADERSHIP

Fulbright Scholarship for a fully funded Masters program at CMU	2023-2024
Dean's Honor List at CMU	Fall 2023
Dean's Honor List (Senior Year at LUMS)	2020