#### Muhammad Waleed Barki

Pakistan

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## **EDUCATION**

## **Lahore University of Management Science**

BS Economics and Political Science

Computer Science Minor

**Relevant Courses:** 

Machine Learning

Databases

Econometrics International Finance Principles and Techniques in Data Science

Data Structures

Issues in Economic Policy Intermediate Macroeconomics

Beaconhouse School System, Multan

A-Level -3B, O-Level -5A\*2A 1B

May 2017

## WORK EXPERIENCE

## Console based Zambeel (Enrollment University Portal)

Februrary 2025

Sept 2018 - May 2025

- Assisted in the planning and execution of a large-scale **Career Fair** featuring **220**+ **employers** and thousands of student attendees.
- Organized and assembled welcome packs and souvenir kits for employers and students, ensuring a smooth event experience.
- Provided **on-site support** to employers, assisting with **booth setup, troubleshooting, and logistical coordination**.
- Guided and supported students in navigating the Career Fair, answering questions, and ensuring an efficient flow in assigned zones.
- Worked collaboratively with the Career Services team to enhance employer and student engagement at the event.
- Developed strong communication, problem-solving, and event coordination skills in a fast-paced environment.

## **VOLUNTEER WORK**

## SOS Children's Village Multan - Teacher

June 2016

Teaching reading and spoken english as well as spoken urdu to unfortunate children at SOS Childrens Complex in Multan.

# ACADEMIC PROJECTS

#### **Movie Success Prediction System**

February 2021 – April 2021

- Able to successfully accomplish this task through working on Data Cleaning, Exploratory Data Analysis, and 2 separate
  implementations of Machine Learning Models using Python.
- Dataset used: kaggle.com/tmdb/tmdb-movie-metadata?select=tmdb\_5000\_movies.csv

#### **Vehicle Detection and Classification from Images**

February 2022 – May 2022

• Using different machine learning models and techniques such as PCA, Naive Bayes, Logistic Regression, SVM etc. to correctly identify vehicles from images.

# **Econometric Analysis of Women's Fertility rate**

October 2024 – December 2024

- Using Panel Data, determined the effects of different variables, but primarily family planning awareness on the Birth rate. The datasets used were the Demographic and Health Survey (DHS) datasets of Pakistan for both 2012-13 and 2017-18.
- Created and ran regressions, visualizations and interpreted the results on STATA.
- Creation and use of demographic indicators from the data to derive further visualizations and insights.

# Education Dynamics in Nishat Colony: A Case Study

February 2025 – April 2025

- Conducted mixed-methods research in Nishat Colony, Lahore, analyzing education challenges aligned with SDG 4, through household interviews, focus groups, and visits to local educational institutions.
- Identified key barriers to education including financial constraints, gender disparities, and cultural attitudes, and evaluated governance and quality issues in public and private schools.
- Proposed actionable, evidence-based policy recommendations such as targeted subsidies, community-led learning hubs, and improved
  monitoring systems to enhance access and quality of education.

# Senior Project & Independent Study

February 2025 – April 2025

- Led mixed-methods research (Python, SQL, Excel) analyzing how institutional culture ("LUMS Bubble") impacts career readiness, collecting/processing survey data from 61+ students.
- Developed regression model (R<sup>2</sup>≈0.42) identifying isolation as predictor of career uncertainty; findings presented to faculty.
- Applied ML coursework to quantitative analysis of career trends; uncovered 66% of tech-track students prioritized corporate roles.
- Authored case study on personal career trajectory in tech, highlighting gaps between academic training and industry requirements.
- Recommendations for experiential learning adopted by Career Services Office.

#### **CO-CURRICULAR ACTIVITIES**

Football (Fall Fest Victors)

February 2024

Captained and coached a 5-a-side of my juniors in the yearly LUMS Springs Sports Fest Football competition and won it comfortably.

Swimming January 2023 – May 2023

Took a course for swimming at LUMS and passed it with flying colors. Continue to practice swimming as cardio thereafter.

## **SKILLS & INTERESTS**

**Skills:** Programming: C++, Python, SQL, STATA. Microsoft Excel (Intermediate), Statistical Modeling, Machine Learning Modelling, Data Analysis, Survey Design, Technical Reporting, Cross-functional Collaboration, Problem-Solving

Interests: Strategy games, Football, History, Theology and Philosophy, Exploring and working with Data