

Altamash Rafiq

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EDUCATION

Duke University Graduate School

M.S. Interdisciplinary Data Science

GPA: 3.9

Final Year Capstone Project:

Developed an open set logo detection software toolkit for cybersecurity firm **Proofpoint Inc**

Github: AltamashRafiq/OpenWorldLogoDetection

Durham, NC, United States

August 2019 – May 2021

Duke University

B.S. Statistical Science, B.A. English Literature

GPA: 3.6 **Honors:** Full Four-Year Scholarship, Dean's List with Distinction

Durham, NC, United States

August 2014 – May 2018

DATA SCIENCE SKILLS

Programming Languages

Python: Pandas, NumPy, Matplotlib, PySpark, sklearn, lightgbm, xgboost, PyTorch, Keras, pyppeteer

R: tidyverse, tidymodels, shiny, rvest, sparklyr, highcharter

Additional: C / C++, PostgreSQL

Proficiencies

Cloud Computing, Machine Learning, Statistical Modeling, Deep Learning, Big Data Mining,

App Development, Tableau Dashboard Development, Geospatial Modeling.

DATA SCIENCE WORK EXPERIENCES

2nd Order Solutions

Glen Allen, VA, United States

Data Scientist Intern - Remote

June 2020 – August 2020

- Produced data-driven lending strategy solutions for a Top 10 US bank client through predictive modeling on their customer acquisition, performance, and relationship data.
- Developed a comprehensive auto-modeling script for our client to identify, quantify, and stress-test the degradation in their customer acquisition model caused by COVID-19's impact on credit bureau and internal financial data.
- Produced a customer segmentation framework that identified the 3% of our client's customer base at 11x higher risk of financial hardship from COVID-19 using Gradient Boosting Machines and Decision Trees.
- Extensively utilized PySpark to extract, clean, and prepare large amounts of customer data for credit risk modeling.

Duke Fuqua School of Business

Durham, NC, United States

Head Teaching Assistant – M.S. Business Analytics

March 2018 – August 2020

- **Courses:** Fraud Analytics (three semesters), Analytics Capstone, Programming Fundamentals for Business.
- Developed assignments on fraud detection/analytics techniques as well as Python and R programming fundamentals.
- Provided programming and machine learning consulting services for Capstone Project teams analyzing industry data.

Duke Interdisciplinary Social Innovators

Durham, NC, United States

Student Consultant

September 2019 – December 2019

- Developed a database management system using Metabase for Book Harvest, a non-profit organization, to streamline their time series data analysis and visualization.
- Implemented and populated a PostgreSQL database on Amazon Web Services to centralize Book Harvest's data.
- Utilized R and Excel to clean and aggregate 6 years' worth of unorganized and disparate book distribution data.
- Worked with Book Harvest representatives to develop their data collection, management and analysis strategy.

Centre for Economic Research in Pakistan

Lahore, Pakistan

Data Analytics Intern

June 2019 – July 2019

- Analyzed data and developed interactive data visualizations for Pakistani government, NGOs, and legal institutions.
- Developed R Shiny app to visualize public health, education, and living standards survey data (300+ surveyed items).
- Prepared/delivered presentations and reports on interactive data visualization in R and Javascript.
- Coded, using OpenDataKit and SurveyCTO, surveys administered in multiple schools.

LEADERSHIP EXPERIENCES

Ad Astra Counselling

Lahore, Pakistan

Co-Founder & Team Head

July 2015 – April 2019

- Founded Ad Astra Counseling, one of Pakistan's most successful private college counselling startups.
- Provided personalized counseling to private clients and students at partnered high schools, helping them secure admissions at dozens of top-tier universities like Harvard, Princeton, and MIT.
- Led team of 12 counselors and helped increase annual revenues from 1M to 7M rupees over 4 years.