IJLAL AHMAD HAQQANI

Data Scientist/Actuary/Economist

I am a certified data scientist and a partly qualified actuary with expertise in various technical tools such as Python, R, SQL and Tableau as well as 9 years of experience in data analytics, economic research and predictive modelling. I am passionate about tackling complex problems using innovative methods and am looking for an opportunity to leverage my skills and knowledge in a dynamic and rewarding environment.

PROFESSIONAL EXPERIENCE

DEPUTY DIRECTOR (DATA SCIENTIST)

Data Services and Innovations Department, State Bank of Pakistan (the central bank of Pakistan) October 2019 - Present

- Worked on Big Data analysis of transaction-level data of large value payment systems in Pakistan and their impact on the overall economic landscape.
- Worked on estimation of agricultural yields and area under production of a number of crops for in-house analysis at the central bank using satellite imagery/data and machine learning.
- Researched use-cases of ML and Big Data in the central bank of Pakistan and worked on setting up a full-fledged Big Data infrastructure.
- Conducted a research project for spatio-temporal estimation of GNI at tehsil level in Pakistan using satellite data and machine learning, the results of which were used in post-floods 2022 disaster and economic loss assessment efforts done at the level of central bank
- Worked on preparing a dashboard for senior management and officials working on bi-monthly monetary policy, detailing key highfrequency economic indicators of the Pakistan economy

ASSISTANT DIRECTOR

Statistics and Data Warehouse Department, State Bank of Pakistan May 2014 - September 2019

- Played an important role in the departmental automation drives concerned with data preparation processes while introducing new tools like R, Python, Oracle, etc.
- Accomplished data warehouse integration of overall departmental workflow and on the alignment of the Bank's data compilation practices with international standards of UN, IMF, OECD, etc.
- Worked on historical data compilation of various important economic time series of Pakistan, as well as design and development of economic dashboards and web applications built in R/Shiny.

ACTUARIAL ASSISTANT

Nauman Associates, Lahore July 2013- September 2013

Worked on valuation and analysis of defined-benefit pension/gratuity liabilities of corporations.

RESEARCH WORK

<u>Subnational Income, Convergence and the Covid-19</u> <u>Pandemic (2021)</u> Location: Karachi, Pakistan Phone: +92 306 2486431 Email: iah91012112@gmail.com

LinkedIn: www.linkedin.com/ijhaqqani
Github: www.github.com/ijhaqqani

PORTFOLIO

Website: https://ijhaqqani.github.io

Projects on Machine Learning, Economic Analysis and Data Visualizations

TECHNICAL AND PROFESSIONAL SKILLS

- Programming Languages
 - Python
 - o R
 - SQL
 - VBA
- Data Science
 - Machine Learning
 - Artificial Intelligence
 - Big DataAnalysis/ApacheSpark
 - Cloud Computing/MS
 Azure
 - Scikit-learn, XGBoost, TensorFlow
 - Exploratory Data Analysis (pandas, tidyverse)
 - DataCleaning/Preparation
 - ETL/Data Pipelines

- Software Used
 - o Tableau
 - MS Office
 - Power BI
 - Other tools for dashboards (Dash, Shiny)
 - VSCode, Spyder,
 RStudio
- Other Skills
 - Analytical thinking and problem solving
 - Web Scraping (BeautifulSoup, Selenium)
 - Geospatial Analysis (QGIS, GDAL in both Python and R)
 - Economic and financial modelling

CERTIFICATES

IBM Professional Data Science Certificate

<u>Google Advanced Data Analytics Professional</u> <u>Certificate</u>

<u>Microsoft Azure Data Scientist Associate (DP-100)</u> <u>Professional Certificate</u>

<u>Google Business Intelligence Professional</u> <u>Certificate</u>

EDUCATION

Partial Qualification towards Associateship, Institute and Faculty of Actuaries

MSc Actuarial Science

University of the Punjab, 2013 GPA: 3.78/4.00; **Graduated at the top of my class**

BSc (Mathematics, Statistics, Economics)
University of the Punjab, 2011