Tuqa Ali

Summary

Business and Data Analyst with a software engineering background and more than three years of work experience in business development and data analysis. Proficient in SQL, Python, SAS Enterprise, R and eager to work with real-world data.

Education

The University of Tennessee at Chattanooga

Chattanooga

August 2021- May 2023

Master of Science in Data Analytics. **GPA: 4.0/4.0**,

Khartoum

BSc (Hons) Electrical and Electronic Engineering, Specialization: Software Engineering, GPA: 3.87/4.0

2013-2018

Publications

Exploring Selection Hyper-heuristics on University of Khartoum Course Timetabling Problem, ICCCEEE20, Khartoum Research that proposed a way to solve the timetabling problem taking University of Khartoum as real problem data set. The research explores all selection hyper-heuristics to arrive to the optimal use of resources given a set of applied constraints using VBA along with MS excel.

Work Experience

University of Khartoum

Graduate Assistant

Chattanooga

Gary W. Rollins Collage of Business, University of Tennessee Chattanooga

August 2021- Present

Assist professors with teaching by tutoring students and with research activities; Currently working on analysing students surveys where they share their concerns after graduation to provide insights to the school for better decision making in helping students.

Business Developer and Data Analyst

Khartoum

SudaPay Co.Itd, Khartoum

October 2018– March 2020

- Established the ERP Systems of SudaPay company using odoo open ERP source.
- Analysed data from different stakeholders using MS excel add ins such as solver to provide mathematical models for better decision making.
- Created a dashboard to provide monthly KPIs with analysis of events which resulted in better monitoring using PowerBI.

Teaching Assistant

Khartoum

University of Khartoum EEE Department

November 2018- March 2019

Taught 160+ students the exercises of Digital Systems Design course and instructed them in the lab associated with the subject.

Notable Projects

Big Data Analysis on Consumer Complaints – Financial Products and Services:

The project included working with different Big data tools such as Hadoop, Spark, Sqoop,Pig, and MapReduce to meet managment needs. **Predictive Analysis for Stock Prices based on Earning Calls:**

Using NLP to provide sentiment analysis for quarterly earning calls, and use it as input to the predictive model along with other economic factors using SAS miner and Python. Taking Google as the company of focus and working on generalizing the model for many companies.

Descriptive Analysis for Tennis Database:

Provide descriptive analysis of Tennis matches over the world from 1960 to 2021 as part of Data Mining and Analytics course using SAS enterprise and Tableau. The analysis consisted of classification, clustering, correlation and regression models.

Database for Cosmetics Online Store:

Building both operational and analytical databases for data implementation and data warehousing using SQL, star schema and ERD diagrams.

Feedforward Neural Network:

Developed and trained the network for breast cancer prediction by women features, using keras and python as part of Neural Network course. **ChatBot:**

Developed and trained a chatbot using NLP and Python to develop responses, learn and develop itself from the responses it receives as inputs.

Skills and Languages:

Skills: Programming languages (Python, R, Java, VBA, Assembly, C/C++), SQL, Visualization tools (Tableau, PowerBI), Big data tools (Hadoop, Spark, Sqoop,Pig, HiveQL, NoSQL, MapReduce), Machine Learning, Supervised and Unsupervised Learning, Deep Learning, Natural Language Processing (NLP), SAS enterprise, Data Mining, Predictive and Descriptive Models, Rstudio, Matlab, MS Office products, LaTeX. **Languages:** Arabic: Native. English: Advanced. Turkish: Intermediate.