

# ALI KHUZEMA

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## PROFILE

A passionate Data Scientist, working in R&D department of Afiniti. I have executed numerous analytical experiments to help solve various problems, making a true impact across different domains and industries such as banking and telecommunication. Proficient in Analytics, Statistics and Machine Learning Methodologies.

## EDUCATION

### MSc in Data Analysis for Business Intelligence

University of Leicester

2019 – 2020 | Leicester, United Kingdom

- **Grade:** Distinction
- **Relevant Modules:** Data Science for Actuaries, Mathematical Modelling, Business Statistics, Data Mining and Neural Networks.
- **Dissertation:** *Human Detection at Railway Crossovers using PIR Sensors combined with Artificial Intelligence* - The developed Model was based on two parts, motion detection using PIR (Passive Infrared) sensors and classification of output signals in frequency domain using Fisher's linear discriminant for human identification.

### BS in Computer Engineering

Ghulam Ishaq Khan Institute of Science & Technology

2014 – 2018 | Topi, Pakistan

- **Relevant Modules:** Database Management Systems
- **Final Year Project (1st Position):** *Non-invasive Glucose Meter* - A device designed to measure glucose level without drawing out the blood using Near-infrared Spectroscopy. A regression-based machine learning model was implemented by collecting the data samples using the invasive device available in the market.

## SKILLS

### Technical Skills

R, Python, SQL, C/C++, C#, MATLAB, Power BI, Microsoft Excel

### Personal Skills

Team player, Multi-tasker, Results-oriented, Risk Mitigation and Management, Critical thinker, Quantitative and Data-Analysis skills.

## REFERENCES

Available on requests.

## PROFESSIONAL EXPERIENCE

### Afiniti

#### Senior Data Scientist

07/2022 – Present | Islamabad, Pakistan

Working in Decisioning - R&D department of Afiniti. My responsibilities are mainly:

- Create and deploy real-time decisioning models for different clients. Models are mainly comprised of classification models; xgboost and lightgbm.
- Developed Gain Debugging Tool to monitor the performance of deployed models and debug the issues if found. This tool has reduced the manual work by approx. 60%
- Implemented NLP on scripts to identify the useful information discussed on the call which can be used in ML models.
- Developed utility tools which can be used by the Data Scientists to assist them in modeling.

### EY (Ernst & Young)

#### Senior Consultant

03/2021 – 07/2022 | Karachi, Pakistan

#### Project: EWA (Earned Wage Access) Market Analysis in Pakistan

- Surveys were conducted among employees from various industry sectors to assess their financial stability and knowledge of EWA.
- The survey results were then analysed, and a report was prepared to highlight the issues faced by the salaried class, as well as how EWA could be a potential solution.

#### Project: Business Consulting Services Dashboard

Developed a comprehensive dashboard to track and monitor all projects within the Business Consulting Service Line. Following were key features:

- Implemented a robust tracking mechanism to monitor the profitability and revenue generated across different sectors and projects.
- Designed a timeline monitoring feature that enabled the tracking of project progress in terms of hours invested.
- Developed a performance monitoring module to track the performance of managers assigned to various projects.

#### Project: Validation of Credit Risk Scorecards (Retail Banking)

- Validated models, comprised of both behavioral and application scorecards. Highlighted various model development gaps, such as in their variable selection and data transformation methodologies.
- Created challenger models with better and improved methodology which provided better accuracy compared to bank's existing models. The challenger models increased accuracy by up to 10%.
- Developed "Affordability Assessment Model" to perform stress testing on loan portfolio to evaluate risk due to possible increase in interest rates in the future.

### LCC - A Talkpool Company

#### Junior Data Scientist

2018 – 2019 | Islamabad, Pakistan

#### Project: Fuel Monitoring System

- Interpreted data coming from our fuel sensors installed on telecom sites and reported any faults detected
- Managed reports highlighting fuel consumption and fuel theft of every sites
- Maintained the system dashboard according to the customer needs
- Provided technical support to the on-field teams to fix issues on the sites.