TO: Aga Khan University

Department of Medicine

Karachi, Pakistan

Nov 14, 2020

POSITION: (10040243) Data Science Manager, Department of Medicine

Dear Hiring Manager,

I would like to introduce myself as an applicant for the 'Data Science Manager' at Department of Medicine, AKU a prestigious and reputable name in health care. I am confident in my ability to perform as a Data Science Manager at Agha Khan due to my extensive education and research experience.

Since 2016, I am conducting research on Data Stream Mining under the supervision of a researcher team from the University of Reading and University of Birmingham, UK. I have published few manuscripts, most recently with Neurocomputing (I-Factor: 4.43). I had an extensive research including selecting features, concept drifts, mining data, data collection techniques and ad-hoc analyses.

My abilities as a Data Scientist are rooted in a sturdy education in Machine Learning. I began with a Bachelor's degree and Post Graduate Diploma in Computer Science from the University of Karachi. I followed this with a Master's degree in Software Engineering from the University of Leicester, UK and awarded with the best student prize.

I would like to thank you for taking the time to review my application. I look forward to hearing more about Agha Khan and the details of the Data Scientist position. I feel that my education and previous research will ensure my success in this role.

Sincerely,

**Mobin Idrees** 

Mobile: 0318-1022016

Email: <a href="mailto:mobin.muhammad@pgr.reading.ac.uk">mobin.muhammad@pgr.reading.ac.uk</a>
Academia: <a href="https://iabfu.academia.edu/MobinIdrees">https://iabfu.academia.edu/MobinIdrees</a>

# **Statement of Research Interest**

"Artificial Intelligence (AI) inspiring me since my childhood. Although, I endeavor acquiring the knowledge but it became addictive. Acquiring and sharing the knowledge passionate me and I wish to contribute towards knowledge and my profession".

## **MOBIN IDREES**

Cell: 03181022016 mobin\_ksa@yahoo.com mobin.muhammad@pgr.reading.ac.uk

#### **EDUCATION**

• M.Sc. Advanced Software Engineering (2013-2015)
University of Leicester, UK. (Distinction, 82.1%)
Dissertation: "Online Machine Learning for Changing Environments".



 M.Sc. (IT) Masters in Computer Science & Information Technologies (2012 -2013)
 Preston University Pakistan (CGPA 3.2)

- PGD. Post Graduate Diploma, Computer Science & Information Sciences (1997) University of Karachi Pakistan (First Division)
- **B.Sc. Bachelors of Science** (Physics, Chemistry, Mathematics) (**1992 -1995**) University of Karachi, Pakistan (Second Division)

**IELTS**: (Overall Band 6.0), Speaking 6.5

## **EMPLOYMENT (2015 – 2019)**

University of DAMMAM – Saudi Arabia

www.iau.edu.sa

**Designation**: Research Assistant/Lecturer

#### **Responsibilities:**

- Research and contribute for Publications and Conferences.
- Analyzed and develop Applications for the University.
- Assist Team members for their computing needs
- Collect, Analyses, interpret data and prepare Reports

#### **Key Achievements:**

- Participated in. "A Funded Project by King Abdulaziz City for Research & Science (KACST), under Grant No AB-25-28".
- Overcoming Obstacles Facing Contractors in Saudi Arabia "A Funded Project by the Deanship of Graduate Studies and Research of the University of Dammam

Role: Data Collection Tool, Interpret Data and Reports.

#### **DATA SCIENCE RESEARCH (2016 – Present)**

Collaborative research in Data Science:

- Idrees, Mobin M., Leandro L. Minku, Frederic Stahl, and Atta Badii. (2020) "A heterogeneous online learning ensemble for non-stationary environments." Knowledge-Based Systems. DOI: 10.1016/j.knosys.2019.104983
   <a href="https://www.sciencedirect.com/science/article/abs/pii/S0950705119304058">https://www.sciencedirect.com/science/article/abs/pii/S0950705119304058</a>
- Idrees, Mobin M, Frederic Stahl, (2019) "Adaptive Deep Learning under Class Label Scarcity and Concept Drift". https://github.com/mimm1/SSL
- Idrees, Mobin M (2019), "Automated Generation of Comparative Reports and Boxplots for Machine Learning algorithms using multiple datasets and streams". https://github.com/mimm1/AT
- Idrees, Mobin M (2018), "Implementation of Statistical Comparisons of Classifiers over Multiple Data Sets. The methods implemented are Friedman's and Post-hoc test Nemenyi" <a href="https://github.com/mimm1/DemsarTool">https://github.com/mimm1/DemsarTool</a>

#### **PROJECTS**

#### • Gene Ontology

Gene Ontology (GO) framework was used for analyzing the concepts(classes) used to describe gene functions and relationships between these concepts. The class hierarchy of gene ontology modeled in Protégé Software.

https://github.com/mimm1/portfolio

#### • DNA Sequence Analysis

Used 'FinchTV' program and BLAST to view DNA sequence file. The sequences were blasted for gene representation. The input sequences were matches with the base calls for the gene prediction.

https://github.com/mimm1/portfolio

#### Real-time Clustering on MAPS

OpenCelliD is Big Data around 39 million records. Applied Clustering on Google MAPS, Implemented in C#, MVC, AJAX, JSON and SQL Server.

https://github.com/mimm1/OpenCell

• Feature Recognition Algorithm on Images.

Feature recognition systems to identify features by using the geometric and topological data. http://www.sciencedirect.com/science/article/pii/S0926580507000192

• Visualizing Large Datasets

Visualization and extracting of worthwhile knowledge, worldwide flight routes network as connected graph of airport dataset created in Gephi.

https://github.com/mimm1/BigData-Visualisation/blob/master/airlines.png

#### **COURSES/ACHIEVEMENTS**

- Online Machine Learning' Course by Prof. Andrew Ng. at Coursera.org (2014)
- Best Student Award year (2016), University of Leicester, UK
- Financial Information System, University of Leicester UK (2016)
- System Re-Engineering, University of Leicester UK. (2016)
- Semantic Web & Ontology Engineering, University of Leicester UK (2016)

#### **PUBLICATIONS**

- **Idrees, M.**, M, Leandro L. M., Frederic T. S., Atta B. "A Heterogeneous Online Learning Ensemble for Non-Stationary Environments" Knowledge-Based Systems Volume 188, 5 January 2020. https://www.sciencedirect.com/science/article/abs/pii/S0950705119304058
- Jadid, M. N., and **Idrees, M., M.**, "A Strategy for Collecting and Evaluating Information on Engineering Consultant Offices Using Neural Networks: A Case Study", The Joint International Conference on Computing and Decision Making, Montreal, Canada. June 14-16, 2006, pp. 2311-2322.
- Jadid, M. N., and **Idrees, M**., "ELSEVIER Journal, "Cost Estimation of 3D Models for the Structural Skeleton by Using Pattern Recognition", Automation in Construction, Vol. 16, pp. 797805.
  - http://www.sciencedirect.com/science/article/pii/S0926580507000192
- Idrees, M., M. and Jadid, M. N, "Implementation of a Web-Based Multi- User Task Management System. Fourth International Conference in the 21st Century (CITCIV), "Accelerating Innovation in Engineering, Management and Technology". July 11-13, 2007, pp. 673-683, Gold Coast, Australia.

- Jadid, M. N., and Idrees, M., "A Geographic Interactive Supply Chain Management System for Projects" World Congress on Engineering and Computer Science. WCECS 2013, October 23 - 25, 2013, San Francisco, USA. http://www.iaeng.org/publication/WCECS2013/WCECS2013\_pp1076-1080.pdf
- Jadid, M. N., and Idrees, M., M., "Electronic Document Management System (EDMS) in Engineering Projects", The 6th Specialty Conference, June 2-3, 2005, pp. 1-9, Toronto, Ontario, Canada. http://toc.proceedings.com/01703webtoc.pdf

#### **SKILLS**

#### **Technical:**

- Ability to work on Computer Languages, e.g. JAVA, C++, R-Language and Python.
- Basic understanding of PACS and DICOM.
- Analyses and interpret data to extract worthwhile knowledge.

#### **Personal:**

- Ability to research independently and in a team.
- Project Management and problem solving.
- Quick learner and desire to acquire and share knowledge.

#### **SERVICE TO PROFESSION**

- Peer reviewed for scholarly journal with Elsevier Neurocomputing Journal.
- Developed Open Source Software for GitHub and SourceForge.
- Published Articles for (Microsoft Development Network) MSDN.

#### **COMMUNITY PROJECT**

To help people locate Blood Donors in developing countries using Online Maps.

**Role:** Coordinator and Developer for Open Source charity project.

https://archive.codeplex.com/?p=blooddonors

#### **MEMBERSHIPS**

- IAENG- International Association of Engineers, Member ID: 149854
- OCRID: 2-2572-3251

## PERSONAL INFORMATION

Name M. MOBIN IDREES

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Email *mobin\_ksa@yahoo.com* 

mobin. muhammad @pgr. reading. ac.uk

Citizenship Pakistan

D.o.B JAN 20, 1975

## **REFERENCES**

#### **Dr Frederic Stahl**

Associate Professor Department of Computer Science, University of Reading,

e: f.t.stahl@reading.ac.uk

w: www.reading.ac.uk

## Dr Leandro Minku (M.Sc. Supervisor)

Lecturer in Intelligent Systems University of Birmingham,

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w: http://www.cs.bham.ac.uk/~minkull/