

# Md Ishtiaq Ahmed

2108 S Solano Dr Apt 11, Las Cruces, NM-88001 | Mobile: +15109469947

Email: ishtiaq06@gmail.com | ishtiaq@nmsu.edu

LinkedIn: [linkedin.com/in/mdishtiaqahmed/](https://www.linkedin.com/in/mdishtiaqahmed/)

## SKILLS

|                                     |  |
|-------------------------------------|--|
| <b>Programming Language</b>         | Python, SQL, PySpark, HTML, and CSS. Working knowledge of JavaScript, Java   |
| <b>Database &amp; Analytics</b>     | MySQL, Postgres, MongoDB, Apache Hadoop, Redis, Azure Databricks, Spark, ETL |
| <b>Frameworks</b>                   | Django, Bootstrap  |
| <b>Cloud Platform</b>               | Amazon Web Services (EC2, S3, RDS, EMR), Google Cloud                        |
| <b>EDA &amp; Data Visualization</b> | Tableau, Power BI, Numpy, Pandas, Matplotlib                                 |
| <b>Machine Learning</b>             | TensorFlow, PyTorch, YOLO  |
| <b>Version Control</b>              | Git  |
| <b>Video Annotation</b>             | CVAT, Roboflow   |

## PROFESSIONAL EXPERIENCE

### Web Developer

**New Mexico Water Resources Research Institute, Las Cruces, New Mexico | Feb 2025 – Till now**

- Developed websites using Django for the backend and HTML, CSS, Bootstrap, and JavaScript for the frontend.
- Created interactive dashboards using Chart.js to display real-time sensor data.
- Designed and managed a MySQL database on AWS RDS, implementing an ETL pipeline to automate sensor data collection, processing, and storage.

### Graduate Research Assistant

**New Mexico State University, Las Cruces, New Mexico | Aug 2024 – Dec 2024**

- Leveraging deep learning models such as YOLOv8 with OpenCV to analyze video data for cattle behavior detection.
- Utilizing rupture and BFAST to detect vegetation (NDVI) breakpoint. Finding correlation with external variables using Bi-LSTM, Granger causality and hypothesis testing.

### Graduate Assistant, Aggie Welcome and Orientation

**New Mexico State University, Las Cruces, New Mexico | Oct 2022 – Aug 2024**

- Planned and executed family events and communication throughout the year.
- Organized and conducted orientations for families of incoming students.

### Data Analyst, Analytics Center of Excellence

**Robi Axiata Limited, Bangladesh | Jan 2020 – Jul 2022**

- Created and maintained data mart using SQL, HiveSQL and python in Oracle Exadata and Hadoop platform. More than 20 targeted product campaigns ran based on the data marts each week.
- Developed and implemented SQL stored procedures to automate daily updates of summary tables by aggregating data from multiple source tables.

- Analyzed large-scale customer data such as voice and data usage pattern, application usage behavior, customer churn and perceived network quality to generate actionable insights and recommend targeted product resulted in around \$500,000 in incremental revenue.
- Created and maintained interactive, automated dashboards and reports using Tableau and Power BI, extracting data directly from database. This enabled faster decision-making, cross-functional team collaboration, fault monitoring and automating reporting processes, which saved over 120 working hours per month.
- Designed and implemented appropriate data architecture and visual analytics to facilitate network and business requirements. Improved process efficiency and saved \$200,000 by integrating external digital network analysis tools with the internal data warehouse.
- Developed automated subscriber application usage profiling using Python and SQL, supporting effective marketing campaigns and saving \$50,000 in development costs.
- Collaborated with external analytics solution providers including SAS, IBM, Ericsson, Infovista & Infogain to trial new solutions in Robi like the churn prevention model, offer personalization and predictive network experience.

## **Radio Network Design & Optimization Engineer, Technology**

**Robi Axiata Limited, Bangladesh | Oct 2014 – Dec 2019**

- Maintained and improved radio network quality of 2G, 3G & 4G networks.
- Identified network fault and performance degradation by analyzing trends using MS Excel and SQL.
- 200+ customer complaints handling per month.

## **RF Engineer, Optimization**

**ONS Telecom Bangladesh Ltd | Aug 2012 – Sep 2014**

- Ensured 3G site acceptance and cluster acceptance through Cluster Optimization and KPI improvement.

## **System Engineer, Service Operation Center**

**Grameenphone Ltd, Bangladesh | Oct 2011 – Jul 2012**

- Monitored radio network performance, network fault identification, and troubleshooting

## **EDUCATION**

### **New Mexico State University, Las Cruces, NM, USA**

Master's of Science in Computer Science, December 2024, GPA 3.95

#### **Master's Project**

Using deep learning model to identify behavior of free roaming cattle in open ranch by creating a training dataset of cattle behavior by doing video annotations and using the dataset to train deep learning model.

### **Rajshahi University of Engineering & Technology, Rajshahi, Bangladesh**

Bachelor of Science in Electronics & Telecommunication Engineering, July 2011, GPA 3.55

## **AWARDS and HONORS**

**Outstanding Graduate Student Leader 2024** of NODA Region III (Association for orientation, transition, and retention in higher education)

**Certified Scrum Master** (May 2020 – May 2022)

**Robi Guiding Principal Champion** in the category "Collaborate to Deliver" in 2020 for developing real-time health risk alerts in Covid-19 risk zone.

## **WORK AUTHORIZATION**

Authorized to work for any employer in the U.S.A under OPT