

BONILKUMAR TAILOR

Data Scientist

Email: boniltailorbt7@gmail.com

Portfolio | LinkedIn | GitHub

SUMMARY

Data-driven professional skilled in Machine Learning, Deep Learning, and Statistical Modelling, with expertise in Python, SQL, and Data Visualization. Passionate about building predictive models and extracting insights from complex datasets to drive business impact.

EDUCATION

Master of Science, Data Science and Artificial Intelligence

University of Liverpool, Liverpool

September 2023 – December 2024

Bachelor of Technology, Electronics & Communications Engineering

Dharmsinh Desai University, India

September 2016 – May 2020

SKILLS

Programming: Python, R, SQL, MySQL, TensorFlow, PyTorch

BI Tools: Tableau, Power BI, MS-Excel

Relevant Courses: Machine Learning, Deep Learning, Natural Language Processing, Probability and Statistics, Data Analytics and Data Mining, Data Structures, Database Management Systems, Big Data Technologies

WORK EXPERIENCE

Senior Systems Analyst

Infosys Limited, Bangalore, India

January 2021 – May 2023

- **Performed root cause analysis** on Telstra's telecommunications database using **Oracle SQL Server**, optimizing SQL queries to enhance data accuracy and processing efficiency.
- Developed and fine-tuned **complex SQL queries**, improving data retrieval efficiency and query execution time.
- Identified **network performance inefficiencies** through SQL-based data analysis, leading to a **30% improvement** in system optimization.
- **Designed dynamic visualizations in MS Excel**, translating complex telecom insights into actionable reports for business stakeholders.

Python Developer

Sigma Trainers and Kits, India

December 2019 – November 2020

- **Developed and optimized scalable Python applications**, ensuring seamless integration of server-side logic with user-facing components.
- Designed and implemented **APIs** to enhance system scalability and performance, enabling efficient data handling and integration across platforms.

ACADEMIC PROJECTS

- **Levelling up the Robot Scientist with Multimodal Skills:** Developed a robotic system for **automating vial capping and decapping**, utilizing **multimodal sensory data** (visual, tactile, and contact) integrated with **machine learning** and **behaviour trees**. **Improved system accuracy by 60%** and processing speed by **15%** through advanced **sensor fusion** and real-time data analysis. Deployed on the **Franka-Emika Panda robotic manipulator**, reducing manual intervention by **9 hours/week** and **increasing lab efficiency by 20%**.
- **Network Traffic Analysis:** Integrated advanced **machine learning models** with **Tableau for data visualization** to enhance the detection of security threats. Improved **detection accuracy by 35%** and reduced **false positive rates by 60%** through optimized ML algorithms and real-time visual insights.
- **Cotton Plant Disease Prediction:** Deep learning classification problem statement where aim was to classify whether the cotton plant is suffering from disease or not. **Used transfer learning model VGG 19 for modelling and Flask framework for web application** and **deployed the model on Heroku**. Accuracy achieved **92.7%**.
- **Stock Price Prediction and Forecasting:** Got the data from Tingo API. Created a **LSTM RNN** model to predict the stock price of the company for next 15 days by providing a time step of previous 100days. Achieved **test RMSE equal to 239.5**.

CERTIFICATONS & ACHIVEMENT

Neural Networks and Deep Learning (deeplearnign.ai, Coursera), Data Analysis with Python (IBM, Coursera), SQL for Data Science with Python (IBM, Coursera), Fundamentals of Visualization with Tableau (UCDAVIS, Coursera)

- **Submitted a research paper** on "Multimodal Behaviour Trees for Robotic Laboratory Task Automation" to **ICRA 2024**.