

#### Nisha

# Microsoft Certified Data Analyst Associate

**Email**: sangwannishasingh1@gmail.com | **Mob**: 07827491408 **LinkedIn Profile**: linkedin.com/in/nishasingh-99483815a Catalina, St. Peter's Close, Staines, TW18 2ED, United Kingdom

#### **SUMMARY**

A meticulous Data Analyst with strong creative and problem solving abilities. Substantial knowledge in Statistical languages and Machine Learning. Seeking to leverage data analytical skills to uplift technological advancement as a Data Analyst with strong desire to learn and grow within an Organisation.

#### **EDUCATION**

## MSc in Data Science and Analytics with a Year in Industry:

2019 - 2020

Royal Holloway University of London, UK

Distinction

- My degree deals with designing data processing solutions for data-intensive analytics problem using software packages such as Python, MATLAB and R.
- Module includes: Data Analysis, Machine Learning, DBMS, Principles of Computation and Programming, Programming for Data analysis, Ethical issues in Artificial Intelligence, Large-Scale Data storage and processing, Data Visualisation and Exploratory analysis & Business Intelligence systems, Infrastructure and Technologies.

#### Bachelor's of Technology in Electronics and Communication Engineering (IP University):

2016 - 2019

Bharati Vidyapeeth's College of Engineering, India

7.8 CGPA

• My degree included a mix of science and maths, along with engineering techniques, designing and managing equipment used to control and monitor processes, systems and machinery in many different areas. It also dealt with software based design tools like Matlab, Pspice, VLSI, Networking, Python and SQL.

#### **TECHNICAL SKILLS**

**Data Analysis Skills:** Predictive Analysis, Statistical Analysis, Data Extraction Wrangling and Exploration, Data Mining, Recommendation Engine, Time Series, Visualisation, Tableau, Sentiment Analysis, Supervised and Unsupervised Learning Algorithms like Decision Trees, Random Forest, Regression and Classification, Naive Bayes, Support vector Machine, Neural Networks and clustering.

Languages: R, Python, Matlab.

### **Database Skills: SQL and Relational Database**

I picked up twitter database and brought it down to 3rd normal form through decomposition, ran complex queries to check its efficiency using MySQL.

Reporting Tools: Power BI (Microsoft Power Bi Certified Data Analyst Associate), Tableau.

### WORK EXPERIENCE

### NCS-IT, UK

### **Data Analyst Intern**

June 2020 - Till Present

- Load, Review and validate NHS patient dataset using SQL and various tools.
- Develop policies and procedures for the collection and analysis of data using Power BI and Tableau.
- Implement new data analysis methodologies and Perform data profiling to identify and understand anomalies.
- Create new data procurement and processing programs.
- Presented data, manipulated it using SQL Server and drawn conclusions to team in order to improve strategies and operations.
- Developed dashboards in Power BI for the visual analysis of datasets.
- Developed documentation for data flows, processes, testing and training.
- Support implemented BI solutions by addressing user questions and inquiries, monetary performance, and communicating technical and functional issues.
- Interpreting data, analyse results using statistical techniques and provide ongoing reports.
- Creating and automating customer profitability report using DAX functions. Explored data in variety of ways and across multiple visualisations using Tableau.
- Strategic expertise in design of experiments data collection, analysis and visualisation
- Gather all reporting requirements and create a reporting model in SQL Server based upon Kimball methodology (Fact Tables and Dimensions)
- Create Stored procedures and views to populate the reports
- Developed complex SQL queries using stored procedures, common table expressions (CTEs), temporary table to support Tableau
- Research and transform information from raw data into an easily understood analysis that identifies trends and insights for the organisation.
- Use a variety of sources inside and outside of the company to collect, aggregate and analyse data.
- Worked on Interactive Dashboard for Building story and presenting to business using Tableau.

- Involved in Data Preprocessing techniques for making the data useful for creating Machine Learning models.
- Involved in implementing various regression and classification algorithms by using various sklearn libraries such as Linear Regression, Decision Trees and Naive Baye's.

# Rainopsys Technosol Pvt Ltd, India Data Analyst

Jan 2019 - Sept 2019

- Converted data into actionable insights by predicting and modelling future outcomes for enhancing business solutions.
- Performed SQL Server functions for data manipulation.
- Worked on of Microsoft BI reporting tools e.g. Power BI.
- Designing and maintaining data systems and databases; this includes fixing coding errors and other data-related problems.
- Communicating with onshore team on daily basis sharing the updates/progress etc.
- Created Dashboards/Reports (Ad-hoc) for clients/other teams.
- Troubleshooted various issues in data structures and servers through server optimisation.
- Load CSV, Excel, Access Database and Flat files into Staging Data Source using SSIS.
- Create a multi-dimensional Data model in SQL Server based upon Kimball methodology (Fact Tables and Dimensions)
- Automate Delta loads into the multi-dimensional database using SSIS. Analyse client databases to evaluate the design of the database for purpose of reporting
- Developed SQL queries using stored procedures, common table expressions (CTEs), temporary table to support data Transformation

#### RESEARCH AND DEVELOPMENT

# Research paper published in Frontiers in Optics, OSA

Title: "Channel Allocation Algorithm in Hybrid DWDM Systems for Reduction of FWM"

#### Research paper published in Optical Engineering, SPIE

Title: "Unequally Spaced Decreasing base units-unequally spaced channel allocation algorithm for dense wavelength division multiplexed transmission systems"

# **Position of Responsibility**

#### Training & Placement Coordinator at BVCOE T&P Cell

College's Training & Placement cell; maintains corporate relations to increase internship and placement opportunities for students

• Networking and Organisational skills: Organised placement drives – coordinating with the company and students with effective

- Networking and Organisational skills: Organised placement drives coordinating with the company and students with effective communication skills; reserving college resources
- Attention to detail: Conducted CV building and interview preparation workshops for all the final year students, more than 50 applications got selected
- Adaptability and Flexibility: Quickly learned Microsoft office including Excel (macros) for maintaining student record
- Critical thinking and Problem solving skills: Took one to one query solving sessions with students having trouble with T&P

### **Event Coordinator at NSS (National Service Society)**

The National Service Scheme is a public service program conducted by the Ministry of Youth Affairs and Sports of the Government of India

- Responsibility and Reliability: Supervised organisation of several educational campaigns across the Country
- Volunteering: Organised book collection drives for the less privileged in the hinterlands of India
- Initiative and self-Starter: Responsible for Clean India Movement to raise awareness about cleanliness, sanitation and hygiene

### **Event Manager at Xtasy**

College's annual cultural festival that witnesses participation from across India in events as diverse as fashion shows and futsal tournaments

- Teamwork & Leadership skills:Responsible for global management of event organised during the Fest;Led a team of 50 students
- Initiative and Management skills: Coordinated sponsorships and public relations; brought in funds worth GBP 3,500

# INTERNSHIPS AND TRAININGS

## Bharat Electronics Limited, UP, Ghaziabad

Surface Mount Technology and Radar Systems: Technical skills

- Worked on designing and engineering various printed circuit boards using surface mount technology
- Risk management & process analysis: Performed fabrication & inspection of PCBs during later stages of manufacturing process
- Evaluated and benchmarked the performance of different radars such as Rohini Radar

## Bharati Vidyapeeth's College of Engineering, New Delhi

Internet of Things:Software skills

- Developed android applications to control WebIOPi enabled Raspberry pi sensors for live parameter tracking
- Used tools such as Read Weather and Twilio to configure applications to track weather and alert users

## Bharati Vidyapeeth's college of Engineering, New Delhi

Intern: Embedded Systems

- Developed android applications for day to day tasks such as music player and pedometer
- Designed a human identifier using PIR sensors and ultrasonic distance detectors to automatically switch on and off lights

#### Kasturba Institute of Technology, New Delhi

Netcom Technology: Software skills

- · Implemented services for client projects such as Structured Cabling and IP Security
- Developed networking solutions using packet tracking software

#### PROJECTS AND SEMINARS

## Hybrid Amplification using Erbium Ytterbium Co-doped Fibre Amplifier(EYCDFA)

- Theoretically modelled and numerically analysed EYCDFA under different pumping power configurations
- Evaluated amplifier output power and eye diagram using the software OPTSIM
- Achieved high gain and low noise figure of the WDM-EYCDFA

## Seminar on Hybrid Amplification for Dense Wavelength Division Multiplexing System

- Studied characteristics of all Amplifiers
- Problem solving skills: An Optical amplifier with high gain was introduced using Er doped fibre with Yb
- Effective communication and Presentation skills: recognised as best ppt of the year among all the final year students

## Seminar on Reduction of Four Wave Mixing in Dense Wavelength Division Multiplexing

- Analysed the impact of fibre nonlinearities on the performance of DWDM system
- Proposed an Unequally Spaced Channel Allocation Algorithm, DWDM system, for FWM reduction
- Overall performance in terms of covered optical bandwidth, reduced FWM products and received output power was reported

## Wifi Controlled Humanoid via Raspberry Pi 3B+:

- Built an Raspberry Pi robot configured using python
- Automated humanoid using mobile application
- Performed Forward, backward, left, and right motion programming

#### **Network Visualisation:**

- Built network designs using switches and routers; configured them using Cisco Packet Tracer (simulation software)
- Analysed real time delivery of packets to visualise errors and optimise the network

# ACHIEVEMENTS AND AWARDS

- Presented / published research paper in the field of optics in Optical Society of America Frontiers in optics + Laser Science (FiO+LS)
- Participated in poster presentation at Optical Society of America, Washington DC, US
- Awarded with Robert S.Hilbert Memorial Student Travel Grant at FiO Awards Ceremony
- Football: Won the intra-university football tournament and was awarded the best player award
- Basketball: Part of college's women's basketball team

#### REFERENCES

# Available on Request