Niranjan Kumar Gurram

Email: niranjangurramk@gmail.com | **Contact**: +1 (682)203-6753 | **LinkedIn** ID: linkedin.com/in/niranjangk

SUMMARY

Adaptable and innovative **Computer Science graduate** with **internship experience** in data analytics and business intelligence. Skilled in developing Excel-based forecasting models, automating reports with **VBA,** and building interactive dashboards in **Power BI** to support data-driven decision-making. Proficient in **SQL (queries & stored procedures), Python,** and visualization tools (Power BI, **Tableau**) for transforming complex datasets into actionable insights. Strong foundation in data validation, **KPI tracking**, and market research reporting, with exposure to Big Data technologies **(Apache Spark, Hive, Sqoop)** through academic projects. Adept at problem-solving, analytical reasoning, and collaborating across teams to deliver reliable reporting solutions that align technical outputs with business goals.

EDUCATION

THE UNIVERSITY OF TEXAS ARLINGTON **May 2025**
Master of Science (M.S.), Major: **Computer Science and Information Systems** |, Arlington, TX
Course work: Design and Analysis of Algorithms, Data Structures,Data Analysis & Managing Techniques, Artificial Intelligence, Web Data Management, Data Mining, Cloud Computing & Big Data, Machine Learning, Software Engineering- II , Numerical Methods.

VIGNAN'S UNIVERSITY
Bachelor of Technology(B.Tech), Major: **Computer Science** | India **May 2023**
Course work: Machine Learning, Cloud Computing, Big Data & Analytics, Artificial Intelligence. Mobile Computing, Cryptography & Network Security, Software Engineering, Computer Networks, Operating Systems, Compiler Design, Web Technologies, DBMS, Data structures, OOPS through Java, C Language.

SKILLS

- Programming Languages: Python, SQL, C, JavaScript.
- Web Technologies: HTML5, CSS3, React, Node.js, Laravel.
- Database: MySQL, PostgreSQL, DSL, OLAP, OLTP, DDL, DML.
- Data Engineering & Big Data Technologies: Apache Spark, Apache Airflow, Hadoop, MapReduce.
- Analytical Tools:Tableau, Power BI, Spotfire, Excel.
- Machine Learning & AI: ML, TensorFlow, PyTorch, Scikit-learn, CNN, RNN.
- Familiar Technologies: AWS, Terraform, Jenkins, SHA 256 Algorithm.

WORK EXPERIENCE

Data-Pro IT, India. **August 2022 – February 2023**
Data Analytics Intern | Product: Enterprise BI & Data Analytics Automation for Reporting & Visualization
Tools: Excel, SQL, Python, Tableau, Power BI, Git.

- Automated Excel-based reports with advanced formulas and VBA scripts, reducing manual reporting effort by 30%.
- Developed SQL queries and stored procedures to prepare datasets for dashboards, improving data accessibility and consistency.
- Designed interactive dashboards in Tableau/Power BI to visualize department-level performance trends and key operational metrics.
- Conducted data validation and quality checks using Excel and SQL, ensuring accuracy and reliability of reports.
- Collaborated with the team using Git/GitHub version control, streamlining updates and documentation.
- Gained exposure to Apache Spark, Hive, and Airflow through academic-style tasks, building foundational understanding of Big Data workflows.

PROJECT EXPERIENCE

Olympic Data Analytics using Azure
Tools: SQL, Python, Tableau, Spotfire, Excel, Git, GitHub
- Reduced execution time by 45% through SQL analysis on transformed data, optimizing query performance using Azure Synapse Analytics and SQL.
- Enabled processing of large datasets up to 50% faster by optimizing data transformations using Apache Spark within Azure Databricks and integrating with REST APIs..
- Reduced unauthorized access incidents by 100% by enhancing data security and governance through implementing Azure Role-Based Access Control (RBAC) and Azure Active Directory.
- Encountered reporting delays caused by inefficient data processing and addressed them by optimizing transformations with Apache Spark in Azure Databricks and integrating Power BI dashboards, resulting in a 50% increase in processing speed and accelerated data-driven decision-making.

Cloud Computing & Big Data Projects
Tools: Hadoop, Java, MapReduce, Maven, Shell Scripting, Text Processing.
- Improved data processing efficiency by 50% by designing Hadoop MapReduce jobs for large-scale social graph analysis and follower count aggregation.
- Reduced computation time by 40% through distributed matrix multiplication using custom Java Writable classes and optimized MapReduce workflows.
- Boosted ETL throughput and data quality by 45% by implementing customer data cleansing and transformation pipelines.
- Enhanced performance of graph partitioning and clustering tasks by 55% using Maven-packaged Java applications executed in local and distributed environments.
- Improved large-scale graph processing by implementing optimized Hadoop MapReduce workflows with custom Java classes, boosting data processing speed by 50%.

UNIVERSITY EXPERIENCE

Teaching Fellow **January 2025-May 2025**
University of Texas at Arlington (Machine Learning, Deep Learning, Natural Language Processing, Reinforcement Learning)

- Instructed ML & AI Concepts – Taught Neural Networks, Regression Models, SVM, Decision Trees, CNNs, and RNNs.
- Led Hands-on Projects – Guided students in image classification, sentiment analysis, and anomaly detection using Python, TensorFlow, Scikit-learn, and PyTorch.
- Conducted Coding Workshops – Focused on Jupyter Notebooks, NumPy, Pandas, and Matplotlib for data preprocessing and visualization.
- Optimized ML Models – Provided mentorship on hyperparameter tuning, debugging, and System Verilog-based automated testing.
- Achieved Impactful Results – Increased ML project completion by 20%, improved model efficiency by 15%.

Operations Manager – IT Support & Communications **August 2023-May 2024**
University of Texas at Arlington (IT Infrastructure, System Maintenance, Technical Support)

- Recognized & Promoted – Awarded Operations Assistant of the Month and promoted to Operations Manager within four months.
- System Administration – Troubleshoot Windows Server login issues and update 30+ systems in parallel using Unix scripts.
- IT Support & Lab Management – Assisted students with laptop rentals, software troubleshooting, and university application servers.
- Technical Operations – Managed computer lab maintenance, equipment shipments, and IT safety protocols under the supervision of the Assistant Director.
- Process Optimization – Enhanced IT response time by 25%, improving system uptime and overall lab efficiency.

PROJECTS

FinSight360 | Tools: Excel (Power Query, VBA), Power BI

- Developed an automated financial forecasting and budget planning tool integrating Excel models with Power BI dashboards. Built scenario-based forecasting (best/base/worst case) and one-click VBA automation, reducing manual reporting effort by 60% and improving forecast accuracy.

TelecomPulse Benchmarking Suite | Tools: Excel, Tableau, Power BI

- Created a market research and competitor benchmarking solution for the telecom sector using churn and KPI datasets. Built Excel scorecards and BI dashboards comparing ARPU, churn rates, and revenue across competitors, delivering actionable strategy recommendations through interactive reports and presentations.

BizTrack KPI Analytics | Tools : Excel (Power Query), Power BI, DAX

- Designed a business performance tracking system with KPI dashboards covering sales growth, customer retention, and profitability. Integrated multi-source retail datasets, implemented DAX-driven measures, and built drill-down dashboards that enabled actionable insights into underperforming regions and product lines.

VOLUGRAD | Tools: React, Laravel, Node.js, SQL.

- Led a team to Build a volunteer management platform with task tracking, professor dashboards, real-time chat, and security features like 2FA and Captcha. Optimized for cloud deployment, responsive UI, and PWA support.

Block-Level Data Deduplication for Optimized Storage | Tools: AWS, PyCharm, MySQL Workbench, Chunking Algorithm, SHA 256.

- This project tackles the challenges of storage inefficiency and resource wastage due to redundant data in the big data era. Block-level data deduplication seeks to enhance storage efficiency and management by eliminating duplicate data blocks within storage systems. It also seamlessly uploads deduplicated data to the cloud for enhanced accessibility and backup.

Facial Insight Attendance Management System 🆓| Tools: OpenCV, TensorFlow, Flask, MySQL, HTML5, CSS3, JavaScript.

- AI-driven attendance system using OpenCV, TensorFlow, Flask, and MySQL for automated, accurate tracking. Features facial detection, recognition, secure database management, and a user-friendly UI. Reduced manual efforts and improved efficiency.

Image Captioning in Machine Learning | Tools: CNN, RNN, LSTMs, Transformers, TensorFlow, PyTorch, MS COCO, Flickr30k.

- Designed an AI-driven image captioning system integrating CNNs for visual feature extraction RNNs/Transformers for Text generation, Enhanced accuracy using attention mechanisms & evaluated performance on datasets for improved caption coherence.

Real-Time Ride Fare Estimation | Tools: Apache Spark, PySpark, Kafka, HDFS, Python

- Built a Spark-based system to estimate ride fares in real time by processing streaming trip data from Kafka and storing outputs in HDFS.Demonstrated ability to work with distributed data processing, real-time analytics, and big data ecosystem tools.

Audience Tracking using URL Shortener | Tools: Node.js, Express.js, MongoDB, HTML5, CSS3, Bootstrap.

- Built a URL shortener with real-time analytics, geographic tracking, and referral insights to enhance data-driven marketing and user engagement.