

S.VIGNESH | Contact: +1 289 356 7697

vignesh222022@gmail.com

Professional Summary

TECHNICAL SKILLS

Methodologies	SDLC, Agile, Hybrid and Waterfall.
Analysis Techniques	GAP Analysis, SWOT Analysis, Risk Analysis
Quality Management	JIRA
Documentation Tools	SharePoint, MS Office (Word/Excel/Power Point)
Project Management	MS Project, MS Office Suite (Word, Excel, PowerPoint)
BI Tools	Tableau, Power BI, Alterix
Testing Tools	Postman
Languages	SQL, Python (pandas, matplotlib, seaborn, plotly, numpy, keras, tensorflow, pytorch), R (ggplot), ML Techniques, GenAI, LLM
Databases	MS Access, SQL Server, PostgreSQL

PROFESSIONAL EXPERIENCE

Client: Nvest Solutions, IN **Sep 2022 – Sep 2023**
Position: Business Analyst

Key Responsibilities:

- Gathered and analyzed business requirements, translating them into technical specifications to support decision-making.
- Developed SQL queries, stored procedures, and triggers for data retrieval and business process automation.
- Created interactive dashboards and visualizations using Power BI for actionable insights.
- Automated data integration processes using SSIS to streamline data flow across various sources.
- Generated reports using SSRS, including drill-down and parameterized reports, and scheduled recurring reports.
- Optimized SQL queries to improve system performance and report efficiency.
- Collaborated with stakeholders to ensure reporting outputs aligned with business needs.
- Provided expertise in Azure cloud architecture, including Azure SQL databases and virtual machines.

Environment: Power BI, SQL Server, T-SQL, SSMS, SSRS, Azure

Client: Web-Tech Pvt Ltd, India, **Aug 2021 – Sep 2022**
Position: Junior Data Analyst

Key Responsibilities:

- Worked with managers and clients to gather and analyze business data, identifying key trends and actionable insights to drive business improvements.
- Fine-tuned model hyperparameters and performed assumption checks to optimize algorithm performance.

- Developed interactive dashboards and visualizations using Power BI and Tableau to present insights to stakeholders.
- Collaborated with engineering teams and client stakeholders to deploy analytical prototypes into production environments.
- Automated data integration and reporting processes using SQL and Python, streamlining workflows and improving efficiency.
- Conducted risk analysis and developed data models, contributing to strategic business decisions.
- Worked with cloud platforms (Azure) to handle large datasets, ensuring seamless data processing and analysis.

Environment: Python, R, SQL, Power BI, Tableau, Azure, Data Modeling

Education:

- Bachelor of Technology in Computer Science, DCE, India
- Masters in Business Analytics and AI, OntarioTech University, Canada

Projects:

Optimizing Investment Outcomes: Comparative Analysis of Technical Indicator-Based Stock Trading Strategies vs. Mutual Fund Performance

- Implemented nine technical trading strategies in Python, achieving a cumulative return of 624.28% for EMA and outperforming mutual funds in 6 out of 10 years.
- Conducted exploratory data analysis on 10 years of stock data for companies like Apple, Tesla, and NVIDIA, using libraries such as pandas, matplotlib, and pandas_ta.
- Evaluated strategies through metrics like average return, Sharpe ratio, and win rate, identifying the EMA strategy's 23.42% average return and its adaptability to market conditions.
- Presented insights on risk-adjusted returns and diversification strategies, recommending data-driven approaches for portfolio optimization and investor decision-making.

Diabetes Prediction Using R: A Machine Learning Approach

- **Performed** Exploratory Data Analysis (EDA) on a healthcare dataset, identifying key patterns and correlations related to diabetes risk factors.
- **Developed** predictive models using Logistic Regression (**97% accuracy**), Random Forest (**98% accuracy**), and K-Nearest Neighbors (**91% accuracy**), validated through **10-fold cross-validation** for robust evaluation.
- **Applied** manual oversampling techniques to balance the dataset, improving model reliability and ensuring accurate predictions across diverse patient profiles.
- **Delivered** actionable insights through a comprehensive report and presentation, enabling data-driven strategies for diabetes risk assessment and patient management