

SMURUTI RANJAN SWAIN

Business Intelligence Developer | Agile Practitioner | CSPO

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PROFESSIONAL SUMMARY

- Highly analytical business intelligence developer with 4 years of experience in operationalization of advanced solutions.
- Expertise in Agile methodologies, global stakeholder engagement, leading digital transformation, business process documentation and cloud integration initiatives to optimize project lifecycles and drive scalable growth.
- Innovative BI Developer leveraging expertise in real-time data processing and machine learning algorithms. Designed and deployed a scalable data pipeline that reduced processing time by 40% while improving data accuracy by 15%. Skilled in AWS, Spark, and TensorFlow, with a focus on developing AI-enhanced BI solutions.

WORK EXPERIENCE

Vassardigital.ai

Jan 2024 – Present, Hyd

Business Intelligence Developer | Gen AI Product - Chatbot

- **Enabled \$255.3M** in cost avoidance for **Georgia-Pacific** by designing **self-service procurement dashboards** that tracked fiber output quality for tissue, towel, and napkin production, reducing raw material waste by 25% and optimizing supplier selection based on fiber quality metrics across twelve manufacturing facilities.
- Reduced computing costs by **40%** while maintaining SLA compliance by implementing **Snowflake warehouse** optimization strategies including auto-suspend/auto-resume features, right-sizing virtual warehouses, and configuring resource monitors with STATEMENT_TIMEOUT_IN_SECONDS parameters across **15+ production** environments using ACCOUNT_USAGE monitoring.
- Established a comprehensive data governance framework by implementing **Row-Level Security (RLS)** with static and dynamic filtering using USERNAME() functions, created data dictionaries for 50+ key metrics, and designed audit trails for regulatory compliance across multiple user groups and organizational hierarchies.
- **Solved memory bottleneck challenges** by analyzing Power BI Premium dataset performance patterns (identifying memory spikes during refreshes: 981.39 MB vs. 436.91 MB baseline), implementing **Azure Analysis Services** with Log Analytics, and deploying **incremental refresh** strategies using partition-based patterns.
- Improved **dashboard performance by 60%** and eliminated 75% of manual deployment time through Power BI-Snowflake integration using Snowpipe for real-time data ingestion, COPY INTO commands for bulk loading, and **automated deployment pipelines** across Dev/Test/Prod environments using Premium workspace deployment rules.
- **Enhanced analytical capabilities beyond native Power BI** limits by integrating **Python scripts** using Pandas for advanced data manipulation and Matplotlib for custom visualizations, enabling sophisticated statistical analysis and predictive modeling that reduced data processing time by 35% while maintaining sub-30-minute execution windows for automated refresh cycles.
- **Delivered 35% reduction in procurement cycle time** by developing interactive simulation models using Power BI with complex **DAX measures**, enabling procurement teams to evaluate supplier scenarios and optimize decision-making for \$655M annual spend.
- **Reduced monthly financial reporting cycle from 5 days to 2 days**, enabling \$2.3M in faster cash flow decisions by implementing advanced **DAX time intelligence** measures with optimized performance patterns, including custom period-over-period calculations and dynamic date filtering.
- Architected and implemented **Microsoft Fabric SQL Database** solutions with integrated **Power Apps** writeback capabilities, enabling real-time data updates through embedded Power BI applications using Power FX programming and DirectQuery/DirectLake storage modes for **enterprise** clients.
- Developed parameterized **SQL queries** and custom views across multiple database systems (SQL Server, Oracle, PostgreSQL) while implementing **query folding** optimization for enhanced performance in enterprise data warehouses.
- Executed **cross-database joins** and integrated **stored procedures** with complex business logic to create dynamic, flexible data retrieval solutions for comprehensive business intelligence reporting.
- Developed **Power Automate** workflows for automated report distribution and data refresh notifications while embedding Power BI reports in Microsoft Teams with **contextual filtering** to enhance cross-organizational collaboration and self-service analytics.
- Led Power BI content publishing and sharing initiatives across cross-functional teams, provided comprehensive troubleshooting and **problem-solving** support for BI development challenges, and delivered **technical documentation** and training to enhance organizational self-service analytics capabilities.

IT Business Analyst | GP Procurement Application – AiRO

- Designed and developed Power BI dashboards and reports by gathering business requirements, connecting to diverse **data sources** (**SAP BW/HANA, Oracle, Snowflake, Amazon Redshift**), and creating optimized semantic data models with efficient Power Query transformations to deliver scalable, high-performance business intelligence solutions.
- Implemented **REST API** connectivity with OAuth authentication and pagination handling, integrated **Azure Data Factory** pipelines for complex **ETL** processes, and connected **SharePoint** data sources to create comprehensive enterprise data integration solutions.
- Designed **star schema** architectures with multi-fact tables and shared dimensions for sales, finance, and operations data while implementing slowly changing dimension patterns (Type 1, 2, and 3) for customer, product, and supplier data tracking to ensure comprehensive historical data management.
- Developed React.js applications with integrated charting libraries (**Chart.js, Recharts, Victory**) and implemented data integration methods across Azure cloud platforms while applying performance tuning techniques to optimize dashboard and report scalability for enterprise environments.
- Developed comprehensive statistical analysis framework using DAX for regression analysis and correlation matrices while integrating custom Python scripts for machine learning models, resulting in dynamic **what-if scenario** planning and cohort analysis that identified **top 20%** customers contributing 80% revenue through **ABC/Pareto analysis**, ultimately improving inventory turnover by **35%** and increasing customer lifetime value predictions **accuracy by 45%**.
- Led user acceptance testing (**UAT**) efforts by developing test plans, coordinating test cases with **stakeholders**, and facilitating **defect resolution**. Resulted in a successful system deployment and improved user satisfaction.
- Analyzed customer interaction data and **user feedback** to identify patterns, trends, and areas for improvement in chatbot performance.
- Conducted regular retrospectives to identify lessons learned and areas for **process optimization**.
- Worked with **Sales team** on crafting business opportunities for Connected Customer services and product engagement through value proposition consultation, service offering and business conversations with customers and industry in the area of GenAI.

PROJECTS

- **Job Salary Estimator:** Created a tool that estimates salaries (accurate within \$12k) to help data scientists negotiate their income when they get a job. Optimized Linear and Random Forest using GridsearchCV to reach the best model.
- **Sign-Up Flow Optimization Analysis with Python, SQL and BI:** Conducted an in-depth optimization analysis using DAX and implemented robust A/B testing to validate the findings.

SKILLS

- **BI Tools:** Python | SQL Server | Power BI | DAX | Tableau | Excel VBA | MS Office | Jira | Confluence | SAP Ariba | Salesforce | MS Visio | Power Apps | MSBI stack – SRSS, SSIS, SSAS | BPMN
- **BI Skills:** SQL and Database | Data Warehousing | ETL Process | Data Modelling and Design | Data Mining and Analytics | Data Visualization and Reporting | Data Quality and Governance | Cloud Computing (Azure) | Big Data (Hadoop, Spark) | Generative AI
- **Data Analysis:** Calculated columns | Creating Relationships | Power Query | Data Modeling | Hierarchies | Inductive Reasoning | Statistics | Data Transformation | API Integration | Data Warehousing | KPI | Performance Tuning | Pivot | Shopify | Azure | Open AI | Claude | Groq.
- **PM Expertise:** Agile | SDLC | Business Analysis | BRD/FRD | Documentation | Process Automation | Strategic Presentations

EDUCATION

- **Master of Business Administration (MBA, 2019-21)**, Analytics and Marketing Management | **KSOM (KIIT University)**
- **Bachelor of Engineering (B.Tech, 2013-17)**, Electrical Engineering | **GIET Gunupur (BPUT University)**

CERTIFICATIONS

- **Certified Scrum Product Owner (CSPO)** | Scrum Alliance | 2024 – Active