RAHUL BHATTACHARYA

Data Scientist, Analytical Insights & Visualization Expert

PROFESSIONAL SUMMARY

Experienced Data Scientist with 15+ years in Finance and Accounting initiatives, leverages technical knowledge, business perspective, analytical skills, and passion for data science to develop actionable insights, drive strategic planning, and optimize operational outcomes. Proven ability to collaborate with cross-functional teams and present data-driven recommendations to senior leadership. Expertise across healthcare, retail, finance, accounting, and credit analysis domains.

WORK HISTORY

Senior Data Scientist, 12/2024 to Current
Walgreens (TCS Project) - Deerfield, Illinois

- Developed and deployed advanced **scheduling and forecasting models** using **Python** to support data-driven planning.
- Analyzed historical **trends and patterns** to improve forecast reliability and scheduling precision.
  Built and **optimized** time-series models in **Databricks** notebooks, leveraging PySpark for experimentation.
- **Automated** data ingestion pipelines using **Azure Data Factory** to feed real-time and batch data into forecasting models.
- Applied **data cleaning** and feature engineering techniques in **Python** to **enhance model input** quality.
- Created modular and reusable **Python** components for forecasting logic to **simplify maintenance and scaling**.
- Integrated external signals and business constraints to fine-tune model outputs in **Databricks**.
- Scheduled batch predictions and model refresh cycles using **Azure Data Factory** triggers and pipelines.
- Collaborated across teams to validate **model** assumptions and continuously improve **prediction accuracy**.
- Delivered **measurable improvements** in scheduling efficiency, reducing manual intervention through **automation**.

Skills: Data Science • Python • Databricks • Azure Data Factory • Azure Data Lake • Statistical Data Analysis • Cluster Analysis
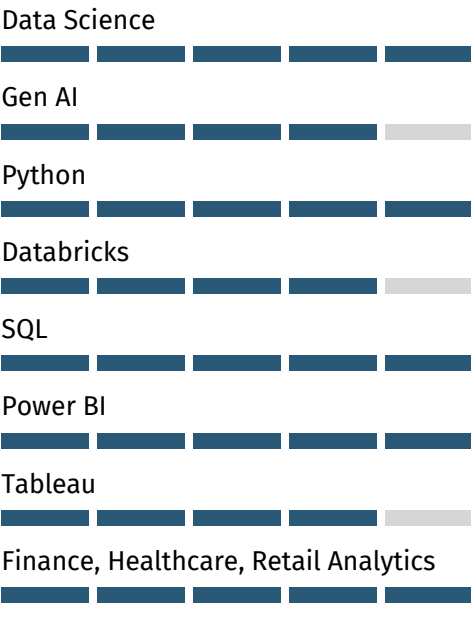
Senior Data Analyst and Technical Architect, 07/2023 to 11/2024
United Healthcare Group (TCS Project) - Chicago, IL

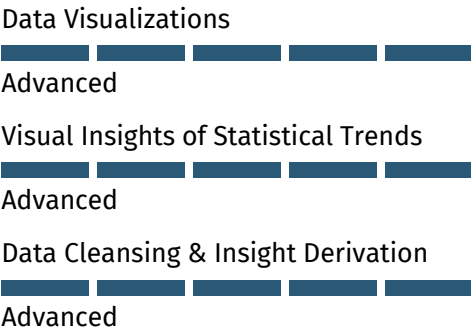- Designed business intelligence capabilities with the development of

SKILLS

Data Science

Gen AI

Python

Databricks

SQL

Power BI

Tableau

Finance, Healthcare, Retail Analytics

WEBSITES, PORTFOLIOS, PROFILES

TECHNICAL SKILLS

Data Visualizations

Advanced

Visual Insights of Statistical Trends

Advanced

Data Cleansing & Insight Derivation

Advanced

advanced **analytical dashboards** and KPIs using **healthcare clinical data** in collaboration with pharmacy managers, product owners, and technology leadership teams.

- Implemented **scalable Power BI designs** for **patient data analytics** using best practices for data modeling and **migrated over 50%** of static Tableau reports to interactive Power BI dashboards.
- Built **dynamic SSIS interfaces** using **healthcare medication data** with separate systems to ensure seamless integration between databases and analytical tools, create **SQL Agent** jobs, maximizing system efficiency across departments.
- Optimized the **performance** of complex **SQL Server** stored procedures and **Tableau** dashboards to track **financial and operational performance** across all business units.

Data Analytics Lead, 07/2022 to 05/2023
Bombardier (TCS Project) - Chicago, IL

- Streamlined existing **financial data landscape and challenges** to design new **roadmap** for scalability and determined the potential organizational benefit and **data model** across each system.
- Established robust performance metrics for tracking progress within the **aeronautical operations data engineering** using Databricks systems.
- Participated with business and technical teams to design key logics in **cross-departmental strategy meetings** as a representative of the analytics team.
- Conducted **exhaustive interactive analyses** using libraries like Pandas and NumPy to clean, filter, and transform data in Python.
- Writing Python scripts to pull data from CSVs and load to databases to **identify trends and data patterns** and inform executive leadership for strategic business decisions.

Data Analyst and Data Governance Lead, 03/2022 to 06/2022
Galderma (TCS Project) - Chicago, IL

- Developed custom **operations data reconciliation jobs, reports** and Databricks packages to extract actionable insights from complex datasets.
- Spearheaded the development of an **automated reporting** system in Power BI for streamlined tracking of KPIs **reducing manual reporting by over 25%**.
- Championed a culture of innovation by encouraging experimentation with new approaches to **problem-solving** using data-driven insights.
- Trained team members on **best practices** in data analytics, fostering a culture of continuous improvement.

Data Analytics and EPM Lead, 10/2017 to 02/2022
Walgreens (TCS Project) - Deerfield, IL, USA

- Optimized business requirements and built **financial models** for efficient reporting and **KPI/OKR measurement** using **Data**

Predictive Alerts & Analysis of Processes
Advanced

Automation & Quality Control
Advanced

Performance Tuning Initiatives
Advanced

Oracle Data Integrator
Very Good

Tableau Data Analytics
Very Good

Microsoft Power BI Reporting
Very Good

Oracle BI EE
Very Good

Oracle PLSQL
Advanced

Informatica PowerCenter
Very Good

Unix Shell Scripting
Very Good

PowerShell & Windows Scripting
Good

Advanced Excel Data Analysis and Visualizations
Very Good

Oracle EPM
Very Good

Oracle Hyperion Data Relationship Management
Advanced

Oracle Hyperion Essbase
Very Good

Classification, **Cluster Analysis**, **Forecasting**, and **Outliers Modeling**.

- Implemented **Predictive Financial Data Analysis** process using statistical functions and **Machine Learning** concepts to forecast systems usability and real-time accuracy using **Tableau**, ODI, PLSQL, PowerShell, Databricks, **Microsoft Power BI**.
- Identified and implemented system **optimizations** that **resolved over 75%** process issues and enabled **transparency of business workflows** and critical financial **data quality controls**.
- **Discovered key metrics** of financial systems usage by **dimensional analysis** of business data in **Hyperion Planning** and **EPM** application logs using Python.
- Influenced and collaborated with business and technical teams to define better requirements for organizational processes and **achieve higher productivity and accuracy standards**.
- Analyzed large volumes of application log files for **issue pattern identification** using **Ab Initio** and **Unix Shell Scripting** for enhanced system availability.
- Engaged in C-level executive reporting and dashboard analysis for **insightful business intelligence reporting**.

Skills: Financial Data Classification · Cluster Analysis · Strategic Forecasting · Outliers Model · Oracle Hyperion Data Relationship Management (DRM) · Hyperion Planning · Unix · Tableau · SQL · Microsoft Excel · Oracle Data Integrator (ODI) · Ab Initio

Master Data Management (MDM) and Analytics Lead, 06/2013 to 09/2017
Walgreens (TCS Project) – Deerfield, IL, USA

- **Designed and implemented Oracle EPM** and MDM (Master Data Management) application in DRM after assessing strategic implications of business intelligence data for **Oracle General Ledger** and other **Financial Accounting data** areas.
- Designed and created **financial data models** for **data processing and reporting interfaces** using Oracle Data Integrator (ODI), Unix, PLSQL, OBIEE to integrate financial accounting systems.
- Identify **Process Improvement (PI) strategies** prior to actual impact and brainstorming potential alert mechanisms with leadership thereby **optimizing 90% of impacted business areas**.
- Devised and implemented **real-time financial data quality** monitoring process to ensure **quality controls of business data** and maintain robust **data integrity**.
- Designed and implemented **finance and accounting system enhancements** after extensive requirement meetings and **data mapping sessions** with **30+ business stakeholders**.
- **Visualization and graphical representation** of critical KPIs and financial data in easily comprehensible and actionable format.

Skills: Data Governance • Hyperion Planning • Predictive Analytics • Forecasting • Oracle Hyperion Data Relationship Management (DRM) • ReactJS • Angular • SQL • Master Data Management • Talend • Data

Oracle Hyperion Planning
Good

HTML / CSS / Javascript
Good

Talend Data Integration
Very Good

Ab Initio
Good

Azure Data Factory
Very Good

Databricks
Very Good

Python
Very Good

SQL Server
Advanced

ReactJS
Good

Angular
Good

Java
Very Good

Spring Boot
Good

Governance • Data Integration

Senior Data Analyst and Report Developer, 10/2011 to 05/2013
Experian (TCS Project) – Kolkata, WB, India

- **Designed data warehouse** and implemented large scale **operations data** processing KPIs and performance trend analytics using Informatica PowerCenter, Unix, Windows Batch Scripting, OBIEE, PLSQL.
- Optimized **performance of financial data intensive processes** to achieve million dollars revenue savings by **reducing 70% application downtime**.
- Developed innovative solutions to persistent problems by **identifying business improvement areas** and optimizing reporting and load designs.

Skills: Data Warehousing • Extract, Transform , Load (ETL) • SQL • OBIEE • Informatica PowerCenter • Data Analysis • Data Visualization • Unix • Application Configuration

Data Analyst and Report Developer, 11/2010 to 09/2011
Experian (TCS Project) – Kolkata, WB, India

- Designed and developed **scalable parameterized infrastructure processes** using complex data loading and **financial credit risk assessment logics** using Unix, Informatica PowerCenter, DAC and PLSQL.
- Implemented **financial reporting dashboards** using OBIEE and **automated data quality monitoring** and anomaly detection by Unix and PLSQL.
- Generalized and implemented **application development standards** after due diligence and study across all business units enabling faster decision-making.

Skills: Data Analytics • Data Warehousing • Extract, Transform, Load (ETL) • SQL • OBIEE • Unix • Informatica PowerCenter • Application Configuration

Oracle Database Administrator, 12/2009 to 10/2010
Toyota Financial Services (TCS Project) – Kolkata, WB, India

- Implemented **Oracle Virtual Private Database** to enable role based financial data security for **1000+ report users across multiple business units**.
- Configured **record level and field level access** using access control roles as part of financial data security modelling in Oracle database.
- Influenced **analysis of business data security** and optimized access control roles and processes.

Skills: Database Management System (DBMS) • Oracle Database Administration • Information Security • PL/SQL • SQL • Oracle Database Configuration • Oracle Database Maintenance

EDUCATION

Bachelor of Technology, Information Technology, 06/2005 to 06/2009
Techno India - Salt Lake, Kolkata, WB, India
- Graduated with 8.54 GPA
- Scored 89% (X, State rank 62) and 85% (XII, High School)

LANGUAGES

English

Very Good

Bengali

Excellent

Hindi

Good

INTERESTS

Blogging, Reading and Travelling