Project Summary | **REFERENCES / REPORTS ARE AVAILABLE IF REQUESTED**

Project Scope	Professional + Academic + Personal Projects
Analytics/ML Projects	Page 1 to 2 Top 10 Projects from year 2022-24
SDE/Web/Database Projects	Page 3 to 4 Top 10 Projects from year 2022-24

ANALYTIC PROJECTS

(1) Instagram Reach Analysis – Data Processing & Governance

Project Background: Personal Project | 2024

<u>Tech stack</u>: Power BI, csv

Description:

- Executed an in-depth analysis of a 1,000-record customer loan dataset using Power BI, revealing a top 10% client concentration and identifying critical regional trends.
- Designed interactive dashboards and leveraged PowerBI to translate complex data into actionable business intelligence, driving strategic decision-making.

(2) Software asset management inventory management & cost analysis

Project Background: Professional project executed at BNP Paribas Pvt. Lim | 2023

Tech stack: Excel, VB Scripts, SAM tool, ServiceNow

Description:

- Developed a VB scripts in excel to generate over 100 individual SAM business day-to-day billing and ROI reports with 99% accuracy in under 2 minutes.
- Utilized advanced data processing techniques, improving reporting efficiency by 40% and reliability by 25%.

(3) Student Performance Analysis

Project Background: Personal Project | 2023

<u>Tech stack</u>: IBM SPSS, Excel

Description:

- Orchestrated a large-scale statistical analysis of 10,000 student records, extracting three pivotal KPIs and developing predictive models that enhanced accuracy by 15%.
- Applied IBM SPSS for rigorous variable testing and Excel for impactful data visualization, contributing to improved educational outcomes through targeted insights.

(4) Loan Customer Analysis

Project Background: Professional project executed at ERGO Technologies | 2023

<u>Tech stack</u>: Power BI, SQL

Description:

- Executed an in-depth analysis of a 1,000-record customer loan dataset using Power BI, revealing a top 10% client concentration and identifying critical regional trends.
- Designed interactive dashboards and leveraged Tableau to translate complex data into actionable business intelligence, driving strategic decision-making.

(5) ITSM - Change Management Reports Automation

Project Background: Professional project executed at BNP Paribas Pvt. Lim | 2022

<u>Tech stack</u>: ServiceNow, Excel, JS, VB, VLOOKUP, adv. Excel formulas Description:

Developed an Excel and VBScript-based application to automate data analysis and gap analysis. Integrated with ServiceNow using REST APIs to generate real-time reports on over 500 production change requests and ticket statuses.

• Enhanced reporting efficiency by 40% and reduced manual processing time by 60%.

(6) Twitter - The COVID Effect:

Project Background: Academic Project | 2023

Tech stack: Python, Flask, HTML, CSS, and JavaScript, AWS

Description:

- Analysed 80,000 multilingual tweets using Natural Language Processing (NLP) and Sentiment Analysis to generate dynamic COVID-19 query results with political impact insights.
- Improved sentiment classification accuracy by 85% and reduced query response time by 50%.

(7) Brain Tumour Segmentation Using MRI Reports

<u>Project Background</u>: Academic Project | 2022

Tech stack: Machin Learning, Python, Google collab, JS, image processing

Description:

- Developed a database system with JavaScript and MySQL for image processing.
- Implemented K-means clustering and machine learning algorithms to classify tumour stages from MRI scans, achieving 100% accuracy in segmentation and classification.
- Utilized OpenCV for image processing and TensorFlow for enhanced data interpretation.

(8) Python-based Examination of Uber Driver Journeys

Project Background: Personal Project | 2023

Tech stack: Machin Learning, Python, Google collab

Description:

- Conducted user acceptance testing for a Python-based project analyzing Uber driver journeys.
- Ensured data analysis results met stakeholder expectations and business requirements, leading to a 30% improvement in data accuracy and actionable insights.

(9) Real-time Data Pipeline Management

<u>Project Background : Personal Project | 2023</u>

Tech stack: Java, Docker, Kafka and Kubernetes

Description:

 Optimized real-time graph processing performance by 50% through the implementation of efficient graph processing algorithms in a scalable and fault-tolerant data processing pipeline utilizing Java, Docker, Kafka and Kubernetes

(10) Aggregate Planning at Green Mills

Project Background: Personal Project | 2023

<u>Tech stack</u>: Advance Excel

Description:

- Analysed Chase, Level, and Optimal production strategies to optimize operations amid market fluctuations, focusing on production adjustments and workforce management.
- Achieved 97% accuracy in controllable variables, enabling cost-effective decision-making.

SOFTWARE DEVELOPMENT/WEB/DATABASE PROJECTS:

(1) Store Inventory Database Management System

<u>Project Background : Academic Project | 2024</u> <u>Tech stack : MySQL, HTML, CSS, and JavaScript.</u>

Description:

• Implemented CRUD functionalities with database normalization, complex SQL joins, and aggregate functions. Achieved a 40% improvement in data retrieval efficiency and created comprehensive technical documentation to support system design and user operations for managing over 5,000 inventory records.

(2) CyberArk Implementation

<u>Project Background : Professional project executed at ERGO Technologies | 2023 Tech stack : CyberArk, Active Directory, AWS, Shell script, Project planner, Trello, Clarity Description :</u>

- Managed end-to-end delivery of CyberArk IT security application and BNPP chatbot projects, involving 20+ team members.
- Utilized Scrum and Agile methodologies to oversee program budgeting of \$1.5M, ensured timely completion of 15+ sprints, and maintained stakeholder communication and risk management, resulting in a 95% on-time delivery rate.

(3) Cloud Infrastructure Orchestration with Terraform and AWS

 Executed infrastructure as code (IaC) using Terraform to provision and manage cloud resources on AWS

(4) BNPP Chatbot Implementation

Project Background: Professional project executed at BNP Paribas | 2022

Tech stack: AWS, .NET

Description:

- Led the implementation of an Al-driven chatbot for BNPP India using NLP and machine learning technologies. Managed vendors, conducted technical evaluations, and ensured compliance with SLAs.
- Coordinated with vendors and internal SMEs for bot development, and successfully conducted UAT, synchronizing with end customer teams for solution recommendations and integration support.

(5) MPS Printer Migration: PAN India Refresh of 150+ Printers & Infrastructure for 10K+ Users Professional project executed at BNP Paribas | 2022 Description:

 Led deployment across 6 business entities, delivering the project within 6 months, on time and within budget during the pandemic. Coordinated with stakeholders for future requirements and out-of-scope services.

(6) ITIP & IAM SharePoint Development

<u>Project Background : Professional project executed at BNP Paribas | 2022</u>

Tech stack: SharePoint Console, IAM, Power apps, JavaScript, SharePoint designer, HTML, CSS

Description:

- Designed and developed a SharePoint site for ITIP & IAM using SharePoint Framework (SPFx),
 Power Automate, and JavaScript.
- Focused on enhancing department service branding, optimizing internal workflows, and automating service level processes.

(7) Asset Refresh Slot Booking Tool

<u>Project Background : Professional project executed at BNP Paribas | 2022 Tech stack : SharePoint Console, IAM, Power apps, JavaScript, SharePoint designer, HTML, CSS Description :</u>

 Created a slot booking tool for hardware replacement using SharePoint, PowerApps, Power Automate, and SPFx. Implemented JavaScript and REST APIs to streamline scheduling for 6,000+ users, reducing processing time by 30% and improving scheduling efficiency.

(8) New Joiner Launchpad

<u>Project Background : Professional project executed at BNP Paribas | 2022</u>
<u>Tech stack : SharePoint Console, IAM, Power apps, JavaScript, SharePoint designer, HTML, CSS Description :</u>

- Developed a web handbook using SharePoint and PowerApps, delivering IT and services information to over 1,000 new joiners.
- Integrated interactive features and user-friendly navigation, resulting in a 40% reduction in onboarding time and a 25% increase in new hire satisfaction

(9) Low Light and Over Exposed Image Enhancement Python

Project Background: Personal Project | 2024

<u>Description:</u>

- Applied image contrast algorithm, designing weight matrix for image fusion via illumination estimation techniques to enhance contrast.
- Devised a novel method for fusing input image with artificial image, resulting in improved contrast.

(10) Procurement of Raw Material Using NFC

Project Background: Academic Project | 2018

Description:

Created a web-based app using .NET and SQL for managing raw material procurement.
 Improved inventory management accuracy by 30%, utilized Node.js and Bootstrap for a user-friendly frontend, and implemented data analysis algorithms to predict future inventory needs with 85% accuracy.