

Pranai Basava (Data Science & Analytics Specialist)

• pranaibasava@gmail.com

• +1 (603)-416-4087

• Boston, MA (Open to Relocation)

• [Linkedin](#)

PROFESSIONAL SUMMARY

Results-driven Data Science & Business Intelligence Consultant with 4+ years of experience across data analytics, machine learning, and cloud-based data engineering. Proven success in transforming raw data into actionable insights using Python, SQL, Power BI, and Tableau, driving measurable improvements in sales forecasting, inventory optimization, and reporting automation. Skilled in designing and deploying scalable ETL pipelines, interactive dashboards, and predictive models with strong cloud proficiency (AWS Certified Cloud Practitioner). Adept at collaborating with cross-functional teams to deliver data-driven business solutions, with additional strengths in stakeholder communication, process optimization, and technical documentation.

EXPERIENCE

Data Science & Business Intelligence Consultant

August 2024 – Present

Homeshow LLC / Manchester, NH

- Conducted in-depth sales and inventory analysis using Python (Pandas), SQL, and Power BI, uncovering demand patterns that improved inventory turnover by 18% and reduced stockouts by 15%.
- Designed and deployed a dynamic Power BI dashboard integrating sales, imports, and operational KPIs, providing real-time visibility that enhanced decision-making and reduced reporting time by 50%.
- Developed and implemented a sales forecasting model (leveraging multiple regression techniques using Scikit-learn) to predict seasonal demand, increasing forecast accuracy by 20% and supporting better inventory planning.
- Optimized supply chain processes through data-driven forecasting and process automation, shortening import cycle times by 20% and improving order accuracy.
- Implemented a cloud-based data management system (AWS S3 + AWS Athena) to centralize and automate data capture, enabling seamless collaboration and reducing manual errors by 30%.
- Provided advanced insights into profitability analysis, pricing optimization, and seasonal sales trends, resulting in a 12% increase in average gross margins during peak periods.
- Collaborated with a freelance developer to launch a business website, designing and coding the initial HTML/CSS structure to create a clean, responsive layout and establish the store's online presence.
- Authored detailed SOPs, training manuals, and knowledge-transfer documentation, equipping staff with the tools to sustain continuous data monitoring and process improvements.

Graduate Projects – Data Analytics & Machine Learning

August 2023 – April 2025

Southern New Hampshire University / Manchester, NH

- Led and contributed to 10+ data-driven projects involving data wrangling, advanced visualization, predictive modeling, and business intelligence, applying tools like Python (Pandas, scikit-learn), R (caret), SQL, Tableau, and Power BI to solve real-world business challenges.
- Developed and deployed machine learning models (regression, classification, clustering) for high-impact business problems, achieving up to 85% predictive accuracy on key operational metrics, including sales forecasting, customer behavior modeling, and inventory optimization.
- Engineered and optimized ETL pipelines using Python and AWS (S3, Lambda), automating complex data processing workflows and reducing manual data handling efforts by 70%, significantly improving data throughput.
- Designed and implemented interactive dashboards and business intelligence reports using Power BI and Tableau, providing stakeholders with real-time insights that improved decision-making speed and reduced report generation time by 50%.
- Built and optimized relational database systems with SQL, enhancing data retrieval efficiency and query performance by 40%, resulting in faster report generation for business users.
- Applied advanced regression techniques (linear, logistic, ridge, lasso) and machine learning methodologies to forecast outcomes like sales trends, customer churn, and operational efficiencies, driving actionable insights for business strategy.
- Integrated Git & GitHub for version control, enabling seamless collaboration and reproducibility across multiple projects in a team-oriented environment.
- Conducted web scraping and data acquisition for external datasets, creating automated data collection pipelines and expanding the depth and breadth of analysis.

Business Analyst

December 2021 – December 2022

Tata Consultancy Services / Mumbai, India

- Led end-to-end data analysis for multiple high-profile business initiatives, translating complex business requirements into actionable data-driven insights using advanced tools like Python (Pandas, NumPy, Scikit-learn), SQL, and Tableau to develop interactive dashboards and dynamic reports, improving stakeholder decision-making.

by 40%.

- Applied advanced exploratory data analysis (EDA) techniques to uncover trends and patterns, enabling business leaders to make data-driven strategic decisions on key performance metrics, including sales forecasting, market segmentation, and customer behaviour modelling.
- Spearheaded the automation of reporting workflows by integrating cloud-based (AWS S3, AWS Redshift) and on-premises systems, which reduced manual reporting time by 60%, improved data accessibility, and streamlined business intelligence processes.
- Collaborated closely with the data science team to assess the effectiveness of predictive models and machine learning algorithms (e.g., classification, regression, clustering) in providing actionable insights, achieving up to 85% accuracy in demand forecasting and customer trend analysis.
- Optimized data governance by conducting data quality audits, implementing real-time data validation procedures, and ensuring compliance with data security regulations, which resulted in 30% improvement in data integrity across operational reports.
- Authored comprehensive documentation and designed user-friendly presentations tailored to both technical and non-technical stakeholders, ensuring clear communication of complex data processes and business intelligence insights for faster decision-making.
- Supported SQL-based reports and ad-hoc data requests, providing business teams with rapid responses to operational needs, and ensuring on-demand data access for strategic planning.

Data Engineer

December 2020 – December 2021

Tata Consultancy Services / Mumbai, India

- Engineered and maintained robust data pipelines for large-scale enterprise projects using ETL frameworks (Python, SQL) and cloud-native services like AWS Glue, S3, and Athena, ensuring seamless data ingestion, transformation, and storage across diverse data sources.
- Developed modular ETL scripts in Python (Pandas, NumPy) to automate data cleaning, normalization, and transformation tasks, reducing manual intervention by 70% and improving pipeline reliability.
- Designed and optimized relational data models and implemented data warehousing solutions using AWS Redshift and Star/Snowflake schemas, enhancing data retrieval speed and query performance by 50%.
- Deployed Apache Airflow (intro level) for orchestration of complex data workflows, improving data pipeline monitoring and scheduling reliability, and enabling better transparency across teams.
- Led SQL performance tuning initiatives to improve query execution times by 40%, ensuring high availability and scalability of mission-critical reporting systems.
- Contributed to data governance by integrating IAM roles, security protocols, and implementing data quality checks to maintain compliance with corporate data standards and security policies.
- Collaborated with DevOps teams to integrate CI/CD pipelines (introductory exposure to Docker, Git/GitHub) for automated deployment and testing of ETL processes, ensuring faster and safer updates.
- Supported real-time data processing (intro level) projects exploring batch and stream processing, gaining exposure to tools like Apache Spark for data transformation at scale.
- Authored comprehensive technical documentation covering data pipeline architectures, troubleshooting guides, and best practices, enabling smoother knowledge transfer and operational continuity.

CORE COMPETENCIES & TECHNICAL SKILLS

1.Data Analytics, Machine Learning & BI

Python | Java | R (caret) | Shell Scripting | HTML | CSS | SQL (ANSI SQL, MySQL, PostgreSQL) | Power BI | Tableau | Excel (Advanced) | Pandas | NumPy | Scikit-learn | Matplotlib | Seaborn | BeautifulSoup | SQLAlchemy | Data Wrangling & Cleaning | Exploratory Data Analysis (EDA) | Forecasting (Sales, Inventory) | Regression, Classification, Clustering | Feature Engineering | Model Training & Evaluation | KPI Development | Dashboards & BI Reporting | Reporting Automation | Data Modeling (Star & Snowflake) | Data Governance & Quality Audits | Jupyter Notebooks | Django

2. Cloud & Data Engineering (AWS Focus)

AWS (Certified Cloud Practitioner – S3, Glue, Redshift, Athena, Lambda) | ETL/ELT Pipelines (Python, SQL) | Data Warehousing & Integration | SQL Performance Optimization | Data Lakes | Apache Airflow (intro) | Monitoring & Logging (CloudWatch basics) | Data Security & IAM Roles | CI/CD Concepts | DevOps (intro) | Docker (intro)

3. Tools, Systems & Methodologies

Git | GitHub | Visual Studio Code | PyCharm | Linux (Command Line, Shell Scripting) | Microsoft Office Suite (Excel, Word, PowerPoint, Outlook) | MS Project | ServiceNow | AutoCAD 2D | JIRA & Confluence | Agile (Scrum/Kanban) | SDLC | Markdown Files | Business Requirements Gathering | Stakeholder Communication | Documentation & User Stories | Change Management | Risk Management

SELECTED PROJECTS

Predictive Models (R, Excel) – Southern New Hampshire University November 2024

- Developed and compared predictive models (Linear & Multi-Linear Regression, Logistic Regression, Decision Trees, Random Forest, Neural Networks) to forecast sales performance for a mid-sized tire company.
- Leveraged R (using the Caret package) to clean, preprocess, and analyze the dataset; implemented models and automated reporting via R Markdown for seamless documentation.
- Applied K-fold Cross-Validation and hyperparameter tuning to optimize each model, reducing overfitting and improving predictive accuracy.
- Evaluated models using RMSE, Precision, and Accuracy metrics, identifying the optimal solution to enhance sales forecasting and strategic decision-making.

S&P 500 Companies Analysis (Python, Excel, Tableau)– Southern New Hampshire University July 2024

- Conducted a comprehensive descriptive analysis of S&P 500 companies, focusing on financial metrics, performance trends, and industry comparisons.
- Used Python for data wrangling and Excel for preliminary analysis; developed interactive Tableau dashboards to visualize insights and facilitate executive-level decision-making.
- Presented findings and recommendations through my YouTube channel: [Pranai Basava's Analysis on YouTube](#).

EDUCATION

Master of Science in Information Technology August 2023 – April 2025

Southern New Hampshire University | Manchester, NH

Concentration: Business Analytics

- GPA: 3.97/4.00 | International Merit Scholarship
- Relevant Coursework: Predictive Business Analytics, Project Management, Applied Data Structure and Database, Object Oriented Application Development, Capstone in Info Technology, Design of Decision Support Systems, Telecommunications and Networking, Advanced Information Technology

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

- **AWS Certified Cloud Practitioner** – Amazon Web Services (Issued March 2025)
- **Tableau Desktop Specialist** – In Progress (Expected July 2025)
- Completed multiple certifications (DataCamp, Udemy) covering Python (Data Structures, Pandas, NumPy, Matplotlib, Django basics), SQL (ANSI SQL, MySQL, PostgreSQL), Tableau, Power BI, Git & GitHub, and Shell Scripting.

ACHIEVEMENTS & EXTRACURRICULAR ACTIVITIES

SNHU Cricket Champion & Cricket Team - Captain - SNHU May 2024 – April 2025

- Led the internal college cricket team, organizing strategies and enhancing team performance.
- Champion of the internal college cricket tournaments.

Customer Appreciation Award - Tata Consultancy Services December 2022

- Honoured for automating critical reporting processes, reducing manual effort by 60% and improving reporting turnaround time.
- Recognized for maintaining high-quality deliverables, strengthening client trust, and contributing to overall project success.

Executive Body Member, Institute of Engineers - SRKR Engineering college July 2019 – March 2021

- Coordinated the flagship “Super Nova” technical festival, overseeing logistics, sponsorships, and student outreach.
- Led workshops and technical sessions that boosted participation and skill development among 200+ engineering students.
- Actively involved in mentoring junior students and fostering a collaborative learning environment.