SANJANA GUPTA

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PROFESSIONAL SUMMARY

- **Data Scientist** (1+ years) expertise in **Python**, **SQL**, **Excel**, **Power BI**, and **Machine Learning**.
- Automated **ETL pipelines**, built Power BI dashboards for **50+ clients**, & led award-winning AI hackathon teams.
- Skilled in **data analysis**, **machine learning**, **business intelligence**, data visualization, & mentoring graduate analysts.

EDUCATION

Stevens Institute of Technology	**Hoboken, NJ**
Master's, Data Science, GPA 3.9/4.0	Aug 2023 – May 2025
Ramrao Adik Institute of Technology	**Mumbai, India**
Bachelor's, Information Technology, GPA 3.8/4.0	Aug 2019 – May 2023

TECHNICAL SKILLS

Languages & Databases | Python, R, SQL, MongoDB, C/C++, JavaScript

Tools | Power BI, Tableau, Excel, AWS (EC2, S3, Lambda), Flask, GitHub, Hadoop, Apache Spark

Frameworks & Libraries | Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Keras, XGBoost, Hugging Face Transformers

Statistics | A/B Testing, Hypothesis Testing, Regression Analysis, Time Series Analysis, Probability, Calculus

ML & AI | Supervised & Unsupervised Learning, Deep Learning, NLP, Reinforcement Learning, Computer Vision

PROFESSIONAL EXPERIENCE

Stevens Institute of Technology	**Hoboken, NJ**
Graduate Assistant – Civil, Environmental and Ocean Engineering Department	Jan 2025 – May 2025

- Directed a **research initiative** on **10+ years** of Lake Hopatcong water quality data, applying **time series analysis**, trend detection, and **multivariate statistical modeling** to evaluate environmental health and sustainability.
- Led **40+** office hours for **150+** students, mentoring best practices in statistics and data analysis using **Python**, **R**, **SQL**.

OM Enterprises	**Mumbai, India**
Data Scientist	Jun 2022 – Jun 2023

- Orchestrated the integration of multi-warehouse datasets for **50+ clients** using Python, enhancing **data consistency** and reducing manual reconciliation errors by 95%, enhancing operational reliability across projects.
- Automated **ETL pipelines** with Python and SQL to consolidate and transform warehouse and procurement data, generating interactive **dashboards** that accelerated reporting and decision-making by 60%.
- Analyzed **100K+ SQL records** to optimize resource allocation and project efficiency, using Excel & Power BI.

D.Y. Patil University	**Mumbai, India**
Summer Intern	Jun 2021 – Oct 2021

- Developed a full-stack learning management system in Python, SQL, and Flask; served **2000+ users** with features like forums, meetups, and submission tracking; increased user engagement by **100%**.
- Integrated **admin dashboards** using Power BI for metrics like course completion, progress, grades, login activity, etc.

HIGHLIGHT PROJECTS

Customer Segmentation for Targeted Marketing *Link*

- Processed transactional datasets with **Pandas** and **NumPy**, handling missing values, duplicates, and outliers.
- Segmented customers via **K-Means clustering** (Python, **scikit-learn**) using **RFM** metrics to identify clusters.
- Optimized **marketing strategies** by identifying high-value customers, behavioral patterns, and regional trends.

Time Series Forecasting – Bitcoin Prices (Non-Seasonal data) & Airline Passenger Traffic (Seasonal data) *Link*

- Applied the **Box–Jenkins** methodology to model and forecast **ARIMA** and **SARIMA** datasets.
- Implemented ARIMA(0,1,0) for Bitcoin price prediction using daily aggregated OHLCV data; handled missing values, conducted **ADF stationarity tests**, and validated results with **Ljung–Box diagnostics**.
- Developed SARIMA(0,1,1)(0,1,1)[12] for airline passenger traffic, applying **log transformation** and seasonal differencing to capture **variance** and seasonal patterns with **89% accuracy**.

ACHIEVEMENTS & LEADERSHIP

- **Choice Award** – SurgiTech (**Rutgers HealthHack 2024**) | Automated OR scheduling
- **Data Migration Assistant** – Stevens Institute of Technology | Contentful, Power BI, JavaScript, HTML, CSS
- **Hackathon Team Lead** – **NYU**, **Rutgers**, **Stevens** | Multiple MVPs delivered in under 48 hours
- **Graduate Peer Leader** – Graduate Student Life at Stevens Institute of Technology