## **BALAJI BESTHA**

Jersey City, NJ | +1 551-328-3929 | balajibestha4@gmail.com | LinkedIn: linkedin.com/in/balaji-bestha-0129b029b

### **SUMMARY**

Analytical and results-driven Computer Science graduate with 2+ years of experience in data analysis, business intelligence, and machine learning across internships and academic projects. Proficient in SQL, Python, data visualization, and cloud platforms (Azure, AWS). Demonstrated success in building dashboards, conducting exploratory data analysis (EDA), and developing predictive models using machine learning algorithms. Adept at translating complex data into actionable insights to support strategic business decisions. Strong understanding of data quality, risk metrics, and root cause analysis in operational and reporting environments. Passionate about using data to uncover trends, reduce uncertainty, and drive smarter decisions across business units.

### **EDUCATION**

• Master's in Computer Science | Pace University, New York

Sep 2023 - May 2025

• Bachelor's in Computer Science | Srinivasa Ramanujan Institute of Technology, India

Aug 2019 - May 2023

#### PROFESSIONAL EXPERIENCE

#### Data Analyst Intern | Phoenix Global – Hyderabad, India.

Jan 2023 – Aug 2023

- Collected, profiled, and cleaned raw business data from multiple sources, including internal databases and third-party APIs using **Python (Pandas, NumPy)** and **SQL**, improving data reliability across analytics teams.
- Designed and developed automated Power BI dashboards to visualize sales trends, customer acquisition metrics, and operational KPIs, reducing reporting turnaround time by 35%.
  Conducted comprehensive Exploratory Data Analysis (EDA) on structured and semi-structured datasets to identify hidden patterns and outliers that informed senior
- leadership decisions.
- Wrote advanced **SQL queries** with joins, aggregations, subqueries, and CTEs to extract insights from normalized data schemas and build repeatable data models.
- Identified data quality issues through root cause analysis and implemented validation logic to ensure **data integrity** and **compliance**, leading to a 20% improvement in reporting accuracy.
- Developed and delivered over 10+ ad hoc analysis reports for marketing, finance, and operations teams to support initiatives such as budget allocation, retention modeling, and revenue forecasting.
  Collaborated with cross-functional stakeholders to understand business requirements and convert them into scalable, data-driven solutions through KPIs and visual
- storytelling.
- Documented all data pipelines, queries, and dashboards with clear metadata and standardized templates to align with internal data governance protocols and facilitate onboarding for new analysts.

### Cybersecurity Intern | Cisco Systems - Remote

Apr 2022 - Oct 2022

- Developed and deployed Python-based tools for **log parsing**, **alert generation**, and anomaly detection, enabling real-time monitoring and reducing manual triage time by over 40%.
- Performed **penetration testing**, **threat modeling**, and **vulnerability assessments** on application codebases and system configurations, identifying key security gaps that were remediated before release.
- Built structured security dashboards in Excel and internal tools to monitor trends in threat types, frequency of alerts, and escalation effectiveness over time.
- Leveraged **regular expressions (regex)** and pattern recognition to build classifiers for detecting brute force attacks, phishing attempts, and port scanning behaviors in server logs.
- Worked closely with the Security Operations Center (SOC) team to create playbooks and escalation procedures for handling critical and high-severity alerts efficiently.
- Applied cybersecurity principles such as the CIA triad (Confidentiality, Integrity, Availability) and OWASP Top 10 to the development of scripts and detection logic.
- Delivered a presentation series to junior security analysts and interns on secure scripting practices, highlighting common misconfigurations, injection risks, and log hygiene practices.
- Documented all automation scripts and tool configurations with thorough change logs and user guides to maintain audit readiness and support internal training efforts.

# TECHNICAL SKILLS

- Languages: Python, SQL, R, Java
- Analytics & ML: Pandas, NumPy, Scikit-learn, XGBoost, Matplotlib, Seaborn, TensorFlow, Keras
- Visualization & BI: Power BI, Tableau, Excel (VLOOKUP, Pivot Tables, Macros)
- Data Engineering & Cloud: Azure Data Factory, Azure Synapse, AWS S3, AWS Glue, Redshift, GCP BigQuery, Apache Spark, Airflow, Docker
- Databases: MySQL, PostgreSQL, MongoDB, Firebase
- Other Tools: Git, Jupyter Notebooks, Gradio

### **PROJECTS**

### World Education Data Analytics & Prediction

Jan 2023 – Apr 2024

- Collected and analyzed global education datasets using Python, Pandas, and Matplotlib to identify trends in literacy rates across countries and regions.
- Performed **feature engineering** and applied **machine learning models** such as **Naive Bayes**, **Decision Tree**, and **Random Forest**, achieving an 86% accuracy in classification tasks.
- Built **regression models** to predict continuous literacy scores and validate model performance using R<sup>2</sup> and RMSE metrics.

# **Drone Intrusion Detection System**

Jan 2024 – Apr 2025

- Designed a **real-time drone tracking system** using geospatial logic and the **Haversine formula** to detect unauthorized activity in restricted airspace.
- Implemented a **geofencing model** in Python and developed an alerting mechanism that sent automated emails using the smtplib library when threats were detected.
- Secured communication by integrating **SSL** encryption with **Gmail SMTP**, ensuring sensitive alerts were transmitted safely.

## **CERTIFICATIONS**

- Google Data Analytics Professional Certificate Coursera
- Microsoft Power BI Data Analyst Associate (PL-300)
- Microsoft Certified: Azure Fundamentals (AZ-900)
- AWS Certified Cloud Practitioner