# **BALJINDER SINGH**

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### **EDUCATION**

### **GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY**

Bachelor of Technology, Major in Computer Science (CGPA-8.47)

Delhi, India 2021-2025

#### **EXPERIENCE**

# AI/ML Intern | Jan, 2025 - Present

Delhi, India

Onsite

Defence Research and Development Organisation (DRDO)

- Focusing on the practical applications of **Generative AI** to advance defense technologies and solutions.
- Researching and implementing synthetic data generation, simulation of complex defense scenarios, and secure communication using advanced natural language processing.
- Contributing to DRDO's mission by applying Artificial Intelligence to address critical challenges in defense and innovation.

#### AI/ML Intern | Sep, 2024 - Dec, 2024

U.P., India

Central Research Lab, Bharat Electronics Limited (BEL)

Onsite

- Analyzed large-scale datasets (20+ crore entries) within the SUPER SCADA system, ensuring data quality for optimal model training, leading to improved model accuracy and operational efficiency.
- Engineered predictive models with 85%+ accuracy and implemented a data pipeline for the SUPER SCADA system, achieving 81% forecasting accuracy with N-BEATS and optimizing data flow to Grafana via RabbitMQ, enhancing decision-making and monitoring.
- Collaborated with **cross functional teams** to optimize model performance by **25%**, improving **epoch selection** and **scaling techniques**, reducing **training time** by **20%**, and accelerating **model deployment**.
- Processed and optimized 10+ years of operational data, addressing class imbalances with SMOTE and cost-sensitive learning for rare event prediction, improving detection of equipment failures and service reliability.

# Data Scientist | Management | Feb, 2023 - Aug, 2024

Delhi, India Hybrid

Fleetrr Online Services

- Engineered machine learning models that reduced **inventory errors by 30%** using **regression**, **time-series forecasting**, and **anomaly detection**.
- Conducted statistical analysis with Python (Pandas, NumPy, Matplotlib), uncovering actionable insights that improved decision-making by 25%.
- Automated 10+ KPIs using Python-based dashboards and data pipelines, enabling real-time monitoring and progress tracking across teams.
- Worked with cross-functional teams to streamline resource allocation, automate workflows, and boost operational efficiency.

# **PROJECTS**

### IntelliDocs: AI-Powered Document Query System

PROJECT LINK

- Developed an AI-powered Document QA System using Google Gemini API and ChromaDB, achieving 95%+ query accuracy and efficient text retrieval for 50,000+ documents.
- Optimized NLP workflows for text chunking and embedding generation, boosting retrieval accuracy by 40% and enabling scalability for 1M+ data points.
- Created a Streamlit interface, enabling to upload documents and receive real-time, <2 seconds response time for large-scale document management.

More projects

# **SKILLS**

- Core Areas: Data Science, Artificial Intelligence, Machine Learning (Supervised & Unsupervised Learning, NLP, Neural Networks, EDA, Feature Engineering)
- Programming & Libraries: Python (Scikit-Learn, TensorFlow, Keras, Pandas, NumPy, Beautiful Soup, Seaborn, Matplotlib),
  FastAPI, Streamlit
- Mathematics for ML: Algebra, Probability, Statistics, Calculus, Matrices
- Databases: MySQL, MongoDB, PostgreSQL
- Cloud & Tools: AWS (SageMaker), Jupyter Notebook, VS Code, Git, RabbitMQ, Power BI, Tableau, Canva

# **CERTIFICATIONS**

Complete Data Science Bootcamp

Python & AI

Data Analyst & Visualization Job Simulation

### **ACHIEVEMENTS**

- Developed a high-performing ridership prediction model with accuracy of 85%+ for the SUPER SCADA system at Bharat Electronics Limited (BEL), selected for deployment in the production environment by BEL.
- Led a team of 10 to organize a memorable farewell event for 500+ attendees and played a key role as a core member of Techfest, showcasing strategic planning, effective issue resolution, and seamless resource coordination, all while managing a 100k budget.

### POSITION OF RESPONSIBILITIES

• 2022-2025	Founder & Core member	GENESIS, GNIT	
<ul><li>2022-2025</li></ul>	President	Tech Club, GNIT	
• 2023-2025	Sports head	Sports Cell, GNIT	