

**S Ranjan Mishra, Ph.D.** | Hyderabad, TG. | [sranjanm00@gmail.com](mailto:sranjanm00@gmail.com) | +91 7207708593 | [LinkedIn](#) | [GitHub](#)

## Data Analyst | Business Intelligence Specialist | Technical Program Coordinator

### SUMMARY

Data Analyst with 2+ years of experience delivering actionable insights across healthcare, R&D, and operations. Skilled in Power BI, Python, SQL, and Excel to automate reporting, build dashboards, and support data-driven decisions. Known for aligning analytics with stakeholder goals to reduce delays and improve KPIs. Open to relocation and seeking a long-term role in a forward-looking, growth-oriented firm. *Recommendations available upon request.*

### SKILLS

<b>BI &amp; Data Visualization:</b>	Power BI, DAX, Power Query, Microsoft Excel (Pivot Tables, VLOOKUP), KPI Dashboards, Report Automation, Data Storytelling.
<b>Programming &amp; Data Handling:</b>	Python (pandas, seaborn, numpy, scikit-learn), SQL, PySpark (Familiar), Data Cleaning, Feature Engineering.
<b>Statistical Analysis &amp; Forecasting:</b>	Exploratory Data Analysis (EDA), Hypothesis Testing, Correlation Analysis, Multivariate Analysis, Sensitivity Analysis, A/B Testing, Multi-Objective Optimization.
<b>Machine Learning &amp; Modeling:</b>	Supervised Learning (Classification, Regression), Model Evaluation (Precision, Recall, F1), Cross-Validation, Risk Modeling.
<b>Analytics Methods:</b>	Six Sigma (Green Belt), Business Process Mapping, Root Cause Analysis, IBM Blueworks Live, Microsoft Visio.
<b>Process Improvement:</b>	KPI Development, SOP Development, Agile Documentation, Cross-Functional Collaboration, Technical Reporting, JIRA (Scrum, Kanban, Agile), ClickUp.

### WORK EXPERIENCE

#### Hospital for Sick Children, Toronto, ON. | Research Assistant (Contract) | | 05/2023 – 04/2025

- Contracted to Analyze respiratory support needs in Fontan patients to identify product gaps and modeling targets.
- Developed analytics framework to simulate cardiopulmonary dynamics for **AI-based ventilator control**.
- Engineered a real-time machine learning algorithm, reaching **92% accuracy** in respiratory demand estimation.
- Automated simulation workflows using **Python** and engineering tools, reducing analysis time by **60%**.
- Designed interactive **Power BI** dashboards to monitor pressure curves, airflow trends, and compliance indicators for clinical teams.

#### University of Toronto, Toronto, ON. | Research Assistant (PhD) | 05/2021 – 04/2025

- Evaluated **120+ system variables** across 2 medical device platforms to assess design maturity.
- Developed a real-time design evaluation model **across 3 domains**, improving prioritization and resource planning.
- Built a multi-domain Power BI dashboard to track usability, compliance, and manufacturing risks over **30+ design cycles**.
- Deployed AHP and BWM techniques to rank conflicting metrics, securing **85%** agreement across engineering and clinical teams.
- Integrated FEA outputs, benchtop data, and design history files into a **unified dataset** to enable longitudinal performance tracking.
- Invented the Design Readiness Level (DRL) model to quantify multi-domain readiness, improving granularity by **5x over traditional models**.

### EDUCATION

#### University of Toronto, Toronto, ON. | 05/2021 – 04/2025

PhD Mechanical and Industrial Engineering (GPA: 3.5+/4)

### RELEVANT PROJECTS

#### Complete HRMS System | HRMS Webapp Solution (Ongoing)

- **Building a scalable HRMS platform using Django and Tailwind CSS**, integrating HR, job applications, and document uploads to streamline recruitment workflows.
- **Engineered backend data models** to support applicant tracking, employee management, and job postings, with Firebase-based file storage for resumes and cover letters.

#### Business Intelligence Framework | Livin Interiors (Freelance Consulting Project)

- Conducted a full-scale audit of operational workflows across **sales, presales, marketing, HR, and supply chain**, identifying over **15 key performance indicators (KPIs)** for tracking.
- Improved daily reporting cycle time by **70%**, and uncovered patterns that led to a **12%** increase in lead conversion and optimized inventory response strategies.

#### HR Attrition Analysis | IBM Employee Dataset | [GitHub](#)

- Identified high-risk employee segments (e.g., overtime workers, young professionals, single employees) with **>30% attrition likelihood**, enabling precise targeting.
- Recommended five actionable HR policies, including compensation reform and mentorship programs, projected to reduce attrition by **15–20%** based on model simulations.

### CERTIFICATIONS

**Azure Data Science Fundamentals (DP900)** – Microsoft (Ongoing), **IBM Data Science Foundations** – Coursera, **Google Data Analytics** – Coursera, **Lean Six Sigma Green Belt** – BKO Administration.