# MADHUCHANDRA SRIRAMAPPA

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#### **EDUCATION**

# Illinois Institute of Technology, Chicago, IL

May 2025

Master of Science, Information technology, GPA 3.50

**Masters** - Key courses: Object oriented application development, Advanced topics in data management, Project management, Data networks Vendor management, Operating system security, Product Management.

#### Visvesvaraya Technological University, Bengaluru, India

Jul 2021

Bachelor of Engineering, Information Science, VTU, GPA 3.30

**Bachelors** - Key courses: Data structures, Computer networks, Software testing, Web technology, Big data Analytics, Software project management, Software engineering.

#### **SKILLS**

- **PROGRAMMING LANGUAGES**: PYTHON | JAVA | SQL | R | BASH.
- DATA ANALYSIS: EXCEL | PIVOT TABLES | VLOOKUP | POWER QUERY | A/B TESTING | KPI TRACKING | ROOT CAUSE ANALYSIS.
- TOOLS AND FRAMEWORKS: LOOKER STUDIO | KIBANA | DBT | AIRFLOW | GIT | JIRA | REST API.
- **DATABASES:** POSTGRESQL | SNOWFLAKE | REDSHIFT
- MACHINE LEARNING AND AI: LLMS | CHATGPT API | LANGCHAIN | RAG | VECTOR DATABASES.
- CLOUD PLATFORMS AND SERVICES: AWS | S3 | EC2 | EMR | REDSHIFT | KINESIS | LAMBDA | SAGEMAKER

#### WORK EXPERIENCE

# BACKEND AND DATA ENGINEERING INTERN

Digipix technologies, Bengaluru, India

Nov 2021 – May 2022

- Developed and maintained RESTful APIs for data ingestion and retrieval using Python (Flask/Django) and PostgreSQL, designed relational data models and implemented efficient database queries, improving data access speed by 30%.
- Built ETL-like features for cleaning and transforming incoming user data before storing it in the backend database. Deployed web applications on AWS(EC2/S3) and containerized backend services using Docker. Collaborated with frontend developers to integrate dynamic dashboards with data visualizations for client reporting.

# DATA OPERATIONS AND SUPPORT ENGINEER

DXC technologies (via Fidelis services), India

Jun 2022 - Aug 2022

- Monitored and supported data pipelines and enterprise applications for retail operations ensuring data integrity and availability across multiple systems. Investigated and resolved data discrepancies by querying backend using SQL and reviewing system logs.
- Automated recurring support tasks using Python scripts, reducing manual intervention and resolution time by 25%. Collaborated with infrastructure and databases team to troubleshoot AWS-based data services and application-level issues.
- Documented common data issues, root causes, and resolutions, improving onboarding and knowledge sharing across the support team.

DATA ANALYST Aug 2022 - Jul 2023

Whiterock, Bangalore, India

- Built a Naïve Bayes classifier using TF-IDF vectorization on 50k+ reviews to accurately categorize guest sentiment and pinpoint top keywords driving dissatisfaction.
- Proved a statistically significant link between wait times and poor ratings using a regression model, visualizing the findings in a Power BI dashboard.
- Proposed a new staffing based on an **ARIMA** time-series model that forecasted guest arrival patterns with a low mean Absolute Error (MAE), helping the client reduce wait times by 30% and increase positive mentions by 20%.

### **PROJECTS**

# SALES AND CUSTOMER INSIGHT DASHBOARD-SNOWFLAKE, DBT, LOOKER STUDIO

Feb **2**025

- Modelled e-commerce data (500K+ orders) using dbt and Snowflake to support business reporting.
- Built 10+ dashboards in Looker Studio to track KPIs like revenue, customer retention, and order value, Improved analytics
  accessibility and reduced reporting turnaround by 60%.

# CUSTOMER CHURN ANALYSIS OF TELECOM CUSTOMER DATA

Mar 2025

- Analysed telecom customer data with 7043 records to uncover key factors driving churn using EDA and visualizations.
- Identified high-risk churn groups tenure <12 months and monthly charges>70 showed a 3x higher churn rate
- Build and optimized a logistic regression model that achieved 82% accuracy, improving baseline performance by 20%.

## REALTIME SYSTEM MONITORING WITH KAFKA.ELASTICSEARCH

Apr 2025

- Streamed and indexed 10M+ log events to track live server performance and error rates.
- Built real-time dashboards in Kibana for operational monitoring and alerts.
- Helped DevOps teams detect and resolve system issues proactively