

Gautam Marathe

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EDUCATION

University of Massachusetts

Master's, Data Science, GPA: 4.0

Dartmouth, MA

Sept. 2023 – May 2025

Manipal Institute of Technology

Bachelor's, Mechanical Engineering, GPA: 3.77

Manipal, India

Aug. 2018 – Aug. 2022

EXPERIENCE

UMass Dartmouth

Graduate Analytics Assistant

Dartmouth, MA

Oct. 2024 – Dec. 2024

- Built a **Python-based forecasting model** using **scikit-learn** to predict student dropout risk with **82% accuracy**, enabling early outreach and boosting retention by **20%**.
- Developed accessible, WCAG 2.2 AA-compliant **Power BI dashboards** to track equity gaps in student performance, influencing policy shifts in 3 departments.
- Engineered an **ETL pipeline in Python** for LMS/SIS data that reduced reporting latency by **60%**, powering real-time intervention alerts.
- Conducted A/B testing of academic nudges using **causal inference models**, improving content engagement by **18%** among first-generation students.

Walmart Advanced Systems & Robotics

Data Science Intern

Andover, MA

June 2024 – Sept. 2024

- Created a predictive **network optimization model** in Python using **linear programming** to simulate warehouse throughput under demand spikes, reducing overcapacity risk by **30%**.
- Partnered with accessibility team to audit and revamp internal Tableau dashboards for screen-reader compatibility and **keyboard navigation compliance**.
- Collaborated with data science team to build a **defect prediction classifier** using logistic regression in **PySpark**, identifying 92% of failure cases pre-deployment.

Credit Suisse

Data Scientist

Pune, India

Sept. 2022 – Sept. 2023

- Deployed a **multi-channel campaign optimization model** in **R** to boost customer retention; estimated uplift of **\$4.7M annually**.
- Developed **privacy-aware cohort analysis** scripts in Python to segment 10M+ customers for campaign personalization while ensuring GDPR compliance.
- Wrote Spark jobs to analyze log-level engagement across channels, improving targeting strategies and campaign frequency allocation.
- Designed executive dashboards using Tableau with integrated **accessibility features**, enabling non-technical teams to explore retention trends independently.

Goldman Sachs

STEM Intern – Data Science & Governance

Bengaluru, India

Jan. 2022 – July 2022

- Created a **Python NLP pipeline** to cluster support tickets and recommend triage paths, reducing average response time by **28%**.
- Built a **classification model in scikit-learn** to flag non-compliant transactions, aiding auditors and lowering false negatives by **15%**.
- Wrote accessibility-aware Tableau dashboards to summarize engagement trends; conformed to **screen-reader** and color-contrast requirements.
- Delivered reproducible data science notebooks with unit testing and stakeholder-readable documentation, adopted as team-wide standard.

Formula Manipal

Data Science Lead – Vehicle Dynamics

Manipal, India

Oct. 2019 – Dec. 2021

- Led development of a **regression model in Python** to forecast suspension fatigue using historical telemetry, decreasing failure events by **40%**.

- Built WCAG-compliant, accessible data dashboards to share real-time vehicle diagnostics with alumni stakeholders, increasing sponsorship revenue by **27%**.
- Established telemetry preprocessing pipelines in **PySpark**, cutting simulation data load time by **50%**.
- Conducted training on accessibility standards for team web and dashboard developers to support inclusive user design.

TECHNICAL SKILLS

- **Languages:** Python, SQL, R, DAX, PySpark, YAML
- **Statistical Methods:** Hypothesis testing, anomaly detection, classification, segmentation
- **Data Tools:** Power BI, Tableau, Snowflake, Airflow, Azure Data Explorer, Kafka
- **Data Engineering:** ETL pipelines, CI/CD, metadata management, data APIs
- **Data Modeling:** Dimensional modeling, star schema, normalization
- **Platforms:** AWS S3, Azure Data Factory, Databricks, Kubernetes, SQL Server, GCP Bigquery
- **Collaboration:** Agile, stakeholder engagement, documentation, fraud strategy alignment