# Atharva Deshmukh

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## Education

**Rochester Institute of Technology (GPA: 3.7/4.0)** **May 2025**
Master of Science in Information Technology and Analytics Rochester, NY

- Relevant Coursework: Visual Analytics, Foundation of Data Science and Analytics (ML), Non-Relational Data Management, Information Retrieval, Data Mining, Information Assurance Fundamentals, Data warehousing, Database Systems.

**University of Mumbai (CGPA: 7.4/10)** **May 2021**
Bachelor of Engineering in Computer Engineering Mumbai, India

- Relevant Coursework: Artificial Intelligence, Machine Learning, Analysis of Algorithms, Data Structures, Statistics, Data Modelling, Pentaho, Software Engineering (including Agile development practices).

## Skills

- **Data Analytics and Visualization:** Python (Pandas, NumPy, Matplotlib, Scikit-learn), SQL, Tableau, Power BI Desktop, Power BI Service, MS Excel (pivot tables), Looker, Data storytelling, Google Big Query, Statistical modeling.
- **Programming Languages:** Python, SQL, R, Java, JavaScript, NoSQL, C.
- **Databases and Tools:** MongoDB, MS SQL Server, Oracle SQL, Snowflake, JDBC, SAS, Kettle, REST API, SOAP API, Hadoop.

## Work Experience

**Graduate Teaching Assistant** **Aug 2024 - May 2025**
Rochester Institute of Technology Rochester, NY

- Led interactive lab sessions in Ethics in Computing, guiding students through case studies on algorithmic fairness and data governance to enhance critical data literacy.
- Coordinated the development of course assignments ensuring a 90% participation, integrating ethical frameworks with data analysis, fostering a data-driven decision-making mindset among students.
- Mentored students on best practices in data quality and integrity, emphasizing responsible data collection and analysis to support ethical technology use.

**Dark Horse Digital Solutions** **Jan 2022 - Jul 2023**
Software Consultant Mumbai, India

- Led cross-functional teams in diagnosing and resolving database performance bottlenecks, streamlining transaction workflows by eliminating unnecessary clicks.
- Engineered scalable ETL pipelines using Oracle SQL, processing over 1TB of structured and unstructured data daily and developing pivot table visualizations to drive actionable insights.
- Directed the migration of the OpenText Cordys BPM system to AWS, integrating APIs across cross-functional teams to automate 60% of health insurance claims processing and reduce turnaround times to under 24 hours.

**Dark Horse Digital Solutions** **Jun 2021 - Dec 2023**
Junior Software Consultant Mumbai, India

- Collaborated with Agile and cross-functional teams to extract, analyze, and validate health insurance data, achieving a data integrity rate of over 95% and reducing report generation time by 30% through optimized pivot table visualizations.
- Assisted in optimizing data pipelines by conducting detailed root cause analyses, leading to a 40% reduction in system retrieval times and significantly streamlining data processing workflows.
- Supported the development of data-driven dashboards and visualizations using pivot tables, enhancing operational reporting efficiency by 25% and driving continuous process improvements.

## Project Experience

**Formula 1 Driver Performance Prediction** **Jan 2025 – May 2025**

- Pioneered a Formula 1 Driver Performance Prediction initiative focused on enhancing driver performance forecasts by analyzing over 5 years of historical race data (lap times, telemetry) and real-time feeds using Python (Pandas, NumPy) and PostgreSQL.
- Implemented robust data cleaning and preprocessing techniques including normalization, outlier detection, and feature engineering on 1 million data points structured datasets (e.g., race telemetry, pit-stop logs) to ensure data integrity for advanced predictive modeling.
- Collaborated with racing strategists to define critical KPIs (e.g., overtake success rate, pit-stop efficiency) and developed advanced interactive Tableau dashboards with dynamic filtering and drill-down capabilities that integrate real-time metrics (e.g., tire degradation, fuel efficiency) to highlight key race performance trends and empower data-driven decision-making.