

SINDUJA VENGADESAN

(617) 943-3248 ♦ Boston, MA ♦ sindujav14@gmail.com ♦ [LinkedIn](#) ♦ [GitHub](#)

EDUCATION

Master of Science - Data Analytics Engineering, Northeastern University, Boston (GPA: 4.0) *Expected Dec 2025*
Relevant Coursework: Data Management for Analytics, Data Mining, Applied Reinforcement Learning

Bachelor of Engineering - Computer Science, Anna University, Chennai *Apr 2021*
Relevant Coursework: DBMS, Cloud Computing, Operating System, Algorithms

EXPERIENCE

Data Engineer *Jun 2021 - Dec 2023*
Tata Consultancy Services — Multi-Commodity Exchange *Chennai, TN*

- Spearheaded the construction of a Data Warehouse handling both Historical and Live data, resulting in a notable **83%** enhancement in data retrieval speed
- Implemented efficient **ETL data pipelines** on TalenD, facilitating seamless data migration from several source databases to the warehouse, consequently optimizing business processes by up to **89%** through automation
- Engineered shell scripts to optimize and automate end-of-day **batch processes**, enhancing operational efficiency and productivity gains by **75%**
- Leveraged SQL and T-SQL programming in IBM db2 to create a diverse range of complex Stored Procedures, Triggers, and User Defined Functions for data transformation and loaded into the warehouse
- Conducted thorough stakeholder engagement to gather and understand business strategy, leading to the development of over **150** ad-hoc reports tailored to specific needs, showcasing strong communication skills.
- Generated over **400** Business Intelligence (BI) reports using Tableau Dashboards to drive informed decision-making with advanced analytics, demonstrating proficiency in business analytics
- Collaborated closely with quality assurance (QA) testers to conduct peer pair-testing on **80** BI reports, ensuring the delivery of high-quality analytical solutions

Database Management Intern *Nov 2019 - Dec 2019*
Larson & Toubro (L&T) — IDPL *Chennai, TN*

- Monitored an RDBMS in MySQL Server, proficiently utilizing database operations for managing vehicle spare parts inventory
- Augmented the DB with triggers to optimize database functionality and ensure a seamless user experience
- Worked with cross-functional teams to enhance database operations and workflow efficiency

RELEVANT PROJECTS

Descriptive Modeling: Urban Spatial Order Research Paper (Pandas, Clustering, Seaborn)

Applied K Means and Hierarchical machine learning models to categorize cities into 3 clusters, based on established research methods, supported with visualizations using Seaborn ([Link](#))

Exploratory Data Analysis: Boston City Score Dataset (Pandas, Excel, Matplotlib, Seaborn)

Performed data cleaning using Pandas and MS-Excel, analyzed feature distribution, investigated correlations, and visualized to identify patterns with Matplotlib, in a dataset consisting of over 50K row ([Link](#))

End-to-End Data Visualization: EVs in the state of Washington, USA Dataset(Tableau, Excel, Pandas)

Designed a visualization dashboard in Tableau to analyze diverse aspects of the dataset, with data pre-processing done through Python and MS Excel ([Link](#))

TECHNICAL SKILLS

Programming	Python (Numpy, Pandas, ScikitLearn, PySpark, Matplotlib, Seaborn), SQL, Java
Database Skills	MySQL, IBM db2, PostgreSQL, MongoDB, Graph Databases
Tools	Tableau, Power BI, Google Analytics, Airflow, TalenD, Git, Github, Jira, Excel, MS Office
Core Competencies	ETL, Data Warehousing, Statistics, Data Pipelines, Data Mining, Data Wrangling, Data Cleaning, Data Processing, Data Transformation, Predictive Models, Descriptive Models, Spark