

VIGNESH SANKAR

Boston, MA | (857) 234-9164 | sankar.vi@northeastern.edu | [LinkedIn](#) | [GitHub](#)

EDUCATION

Northeastern University

MS in Data Science; CGPA – 4.0/4.0

Sep. 2023 – Expected May 2025

Boston, MA

- Coursework: Data Management and Processing, Machine Learning and Algorithms.

Anna University

B.E. – Electronics and Communication Engineering; CGPA – 8.8/10.0

Aug. 2017 – Jun. 2021

Chennai, India

- Coursework: Linear Algebra, Data Structures, Probability and Statistics, Database Systems.

PROFESSIONAL EXPERIENCE

Northeastern University

Teaching Assistant

Jan. 2024 – Present

Boston, MA

- Assisting the course DS3000 – “Foundations of Data Science” by hosting office hours and clarifying doubts.

LatentView Analytics

Data Analyst

Jun. 2021 – Aug. 2023

Chennai, India

- Analyzed an annual flagship campaign with **SQL**, **Databricks** and **Python**, elevating reports to director-level visibility and achieving a **20%** efficiency boost in **decision-making**.
- Developed a **Hadoop** data pipeline with **Python** to detect anomalies, reducing turnaround time by **3 days**.
- Devised an Audience Profiling Tool in **Tableau**, employing statistical techniques like the **z-test** to estimate campaign audience size, optimizing selection, and achieving a **30%** efficiency boost.
- Engineered an **A/B Testing** tool in **R** to test newly launched campaigns, yielding a **15%** optimization boost.
- Delivered a quarterly **Excel** plan with customer conversion rate breakdown and **KPI analysis** for **10k+** past campaigns, enhancing budget planning and increasing click and open rates from **3% to 6% QoQ**.

Caterpillar Inc.

Machine Learning Intern

Dec. 2020 – May 2021

Chennai, India

- Built a **SARIMAX** model in Python to predict the failure time of heavy mining equipment, which in turn and reduced monitoring labour and turnaround time from 4 days to **2 days**.
- Applied **Multiclass Classification** to Engine ignition impurity data points with an accuracy of **93%**.

ACADEMIC PROJECTS

Sample Size Estimation Tool

- Designed a [quantitative marketing tool](#) with z-test in **Tableau** to compare the performance of Marketing Campaigns by KPIs and other demographics with an accuracy of **90%**.

Quora – Duplicate question pair prediction

- Implemented NLP and ML Algorithms, such as SVM and Random Forest, to accurately predict duplication in question pairs, achieving an impressive **80%** accuracy rate.

Movie Recommendation System

- Deployed and fine-tuned a **User-Based Collaborative** Movie Recommendation Engine in Python and meticulously crafted a UI in **HTML**, resulting in a notable performance accuracy of **86%**.

Customer Subscription Management System

- Unified a cross-functional **MySQL database** with a Python UI that replicates a subscription-based business model to track the journey of customers engaged to a product.

User Experience Maximization Engine

- Implemented a **clustering engine** with **GMM**, **KMeans** and **DBScan** to a large geospatial dataset to assign Taxi drivers to the optimum nearest hub, thereby increasing user experience.

TECHNICAL SKILLS

- Programming Languages: Python, R, SQL, MATLAB, C, C++, NoSQL, Scala, Kafka, Spark.
- Framework & Tools: Jira, Hive, Scikit, Pandas, PyTorch, Numpy, Matplotlib, TensorFlow, Pyspark, MongoDB.
- Technical Interests: Data Science, NLP, ML, Data Visualization, Deep Learning and Data Engineering.

PUBLICATIONS

- Implemented a [Security Protocol for D2D Communications](#) in 5G Networks with MATLAB and tested its resilience against attacks with Scyther (A protocol verification tool)

AWARDS & RECOGNITION

LatentView Analytics

Chennai, India.

- ENCORE: Effective communication skills and timely delivery of tasks with high quality.
- SPOT: Leadership, Networking, Client Success in Agile Environment

Jun. 2022

Dec. 2022