

# SAI RAGHAVENDRA VIRAVALLI

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## EDUCATION

### Northeastern University

Master's of Science in Information Systems

Relevant Coursework: Data Science, Parallel Machine Learning, Big Data Systems

Boston, MA

Expected May 2023

### Vellore Institute of Technology

Bachelor of Technology in Computer Science Engineering

Vellore, India

June 2020

## TECHNICAL SKILLS

**Programming Languages:** C++, Python, Shell, R, SQL

**Data Science Technologies:** Sklearn, Keras, Pytorch, TensorFlow, scikit-learn, CNN, Neural Networks,

**Databases:** PostgreSQL, MySQL, Big Query, MongoDB

**Data Visualization:** Data studio, Tableau, Microsoft Power BI

**Cloud tools:** GCP, Azure, Docker, Git, Airflow, Spark, Beam, AWS

## EXPERIENCE

### Executive Analyst

Deloitte Touche Tohmatsu Ltd

Mar – Aug 2021

Bengaluru, India

- Improved net banking performance by 25% through designing and developing back-end services using NestJs and React for a top private bank in India
- Developed microservices for APIs using gRPC, reducing client costs by 10x and increasing efficiency by 15%
- Implemented Jira boards to capture and track client's business demands during stakeholder meetings
- Migrated client's database systems to AWS EC2, and implemented an automated queried system using PostgreSQL for data reports, resulting in cost savings and scalability

### Networking and Security Intern

Sify Technologies Ltd

May– Aug 2018

Chennai, India

- Created a chatbot using RNN and LST in Python for the networking department, resulting in 15% time-saving
- Developed networking tools such as ping, traceroute, ipconfig in Python, and automated multiple shell commands for large data execution, resulting in time savings

## ACADEMIC PROJECTS

### Spotify Recommendation and Prediction Analysis

May– Aug 2022

- Evaluated Machine Learning models on Spotify API data and selected the best based on R2 Score
- Developed two genre-based recommendation systems using k-means clustering of audio features:
  - Built a content-based recommendation system that ingests data from the user's playlists using Spotify API
  - Developed a neural Collaborative Filtering recommendation system using TensorFlow, resulting in playlists based on user's preferences using model rankings

### Twitter Marketing Campaign Analysis

Jan– May 2022

- Designed an ETL pipeline for Twitter API data analysis based on keywords, utilizing Airflow and Apache Beam for data transformation and storage in Big Query
- Implemented sentiment analysis with Hugging Face models on AWS Lambda and deployed in FastAPI framework on GCP App Engine, with JWT authentication
- Displayed relevant news based on named entities using open-source News API and real-time metrics on a Google Data Studio dashboard embedded in the WebApp

### Restaurant Management System

Sept– Dec 2021

- Developed software for inventory, online ordering, employee stats, and sales using SQL and Python
- Optimized business metrics through database design and python functions for staffing, pay by phone bill generation and top seller forecasting
- Used Tableau to build a live dashboard providing metrics, data analysis and data insights

## LEADERSHIP EXPERIENCE

### Outreach Director and Project lead

CRY-Child Rights and You

May 2018 – Mar 2020

Vellore, India

- Led growth of organization, established partnerships with NGOs, and executed large-scale projects
- Developed and implemented programs for language training, life skills, career prospects, and personal development, resulting in increased retention and recognition at a national level
- Increased annual budget by 80% through grant writing, CSR relations, and fundraising events, securing Rs. 3,00,000