# SHREE HARI ANBAZHAGAN

Chennai, Tamil Nadu - 600106, India

in linkedin.com/in/a-shreehari

 $\square$  +91 7667899999

**✓** shreeharianbazhagan@gmail.com

### & EXPERIENCE

Development Engineer 1, Data Engineer

July 2023 - present Chennai, India

• Developed ETLs integrating Kafka with AWS Redshift, achieving near-zero downtime and improving reliability.

- Architected scalable, secure solutions with IaC tools and draw.io, reducing deployment time by 30%.
- Designed EnvSyncer to sync data between environments, improving data availability.
- Built **reconciliation frameworks** to validate data integrity between the source and Data Warehouse, improving data accuracy by **40%**.
- Introduced anomaly detection using **AWS Lookout for Metrics**, then integrated it with our in-house application, enhancing user experience.
- Led **knowledge transfer** on the Data Warehouse and existing frameworks, wrote documentation to address gaps, and enabled team on-boarding.
- Assisted the Service Reliability Engineering team in refining deployment strategies through testing and performance enhancements.

Comcast 6

Comcast 6

Jan 2023 - June 2023

- Intern

   Developed a Slack notification system to monitor ETL runs, job status. Providing real-time alerts and daily cost breakdowns
  - Contributed to the **Data Warehouse** application to create a single source of truth for organizational data.
  - Learned about Comcast's **construction ecosystem**, Wi-Fi connectivity processes, business model, and the **significance of data** in driving business decisions.

Lasso and Marquee Design Solutions  $\mathcal{O}$ 

to enhance operational efficiency.

 $June\ 2019\ \hbox{--}\ July\ 2019$ 

Chennai, India

• The internship provided valuable insights into IT operations, teamwork and professional communication.

#### **EDUCATION**

Indian Institute of Technology Madras 🔗

Sep 2023 - present Chennai, India

Diploma in Data Science Gaining expertise in analytics, machine learning, and big data technologies through the program.

SASTRA Deemed University §

July 2019 - May 2023 Thanjavur, India

Bachelor of Technology in Computer Science & Engineering,

Achieved First Class with Distinction.

## PROJECTS

IITM Machine learning project &

Sep 2024 - Nov 2024

- Built models to predict bank telemarketing success.
- Performed **EDA** and **preprocessing**, **trained 4 models**(Logistic Regression, k-Nearest Neighbour, RandomForest, Hist-GradientBoostingClassifier), achieving 87% accuracy and 0.75 F1 macro score.
- Identified bias in the data skewed toward negatives, leading to challenges in achieving better model performance.

Sentiment Analysis and Topic Modeling for Tweets §

Dec 2023 - Feb 2024

- Contributed to the "Inside Out Understanding User Emotions" ML project, analyzing tweet sentiments and topics, presented my findings at **G20 Library Summit 2024**.
- Compiled findings in Excel sheets with sentiment analysis, topic modeling, engagement metrics, heat maps, and graphs to visualize data trends.
- Used **pysentimiento** and **cardiffnlp/tweet-topic-21-multi** to achieve **94.53% accuracy** in tweet insight extraction.

Diabetes prediction &

Jan 2022 - June 2022

- Developed **Django web application**, utilizes machine learning algorithms to predict using basic health metrics.
- Compares each prediction with **six different machine learning models**(Decision Tree, Gaussian Naive Bayes, k-Nearest Neighbour, Logistic Regression, Adaboost, Random Forest) and publishes only the one with the best accuracy.
- Integrated PDF report generation and SMS notification features, with Random Forest achieving 0.87 accuracy, delivering results in downloadable and mobile-friendly formats.

#### Other projects

- Helper & Created reusable helper classes for AWS, API integration, Kafka, and Slack.
- IITM Business Data Management project 🔗 Tackles business challenges through data management and analysis.
- Resume of using LaTeX.

### **P** AWARDS & ACHIEVEMENTS

Part of the team recognized for innovation in sports viewing technology.

• Good Presentation Award, G20 Library Summit 

Feb 8, 2024

Recognized for an impactful presentation on technology integration in libraries.

#### **WORKSHOPS**

• Organized a successful **SQL Workshop Fundraiser** § Sep 8, 2024 Raised funds for **Bhumi** to support shelter children through the LEM program.

• Attended the "Responsible & Safe AI" Workshop at IIT Madras § Explored topics like legal bias, AI attacks, and unlearning, hosted by CeRAI.

• Participated in a Web Development Workshop conducted by Sastra University

A three-day hands-on program focused on building web applications using Django and Python.

Nov 19, 2023

### **₽** PRESENTATIONS

• Shared insights at **G20 Library Summit** § Feb 7-9, 2024 Where technology integration in libraries, applying sentiment analysis and topic modeling on X / Twitter data.

• Discussed data engineering solutions at **Comcast**Focusing on performance optimizations and key insights.

• Demonstrated the **Diabetes Prediction System** project
Highlighting multi-model machine learning techniques and a user-centric web app.

#### SEMINARS & CONFERENCES

• Attended the AWS User Group Chennai session on GenAI and serverless technologies § Sep 3, 2024 Speaker Eric Johnson provided valuable insights on serverless and GenAI.

Participated in IIT E-Summit 2024 69
 Enjoyed talks by venture capitalists Jivraj Singh Sachar, Ranjith Menon, and Vaibhav Domkundwar.

Attended the AWS Awesome Day conference Sessions focused on machine learning, serverless, and big data analytics.

\* TECHNICAL SKILLS

Programming: Python, SQL, Terraform (Infrastructure as Code), shell commands (basic), YAML, JSON.

Tools and Frameworks: AWS (AWS Lambda, Glue, S3, Redshift, Athena, IAM (Roles, Policies), Secrets Manager, CloudWatch), Boto3 (AWS API), REST API, PostgreSQL, Docker, Kafka, Machine Learning (ML), Git, VSCode, JIRA, Excel.

### ✓ VOLUNTEERING & EXTRACURRICULAR

Bhumi & Sep 2024 - present
Centre Coordinator Chennai, India

• Organized workshops, events, and additional classes to meet children's needs, including a **SQL** workshop to raise funds for better living conditions and sports events to foster stronger community engagement.

Bhumi
July 2024 - Sep 2024
LEM Volunteer
Chennai, India

• As part of the Ignite **Little Einstein Mathematics** program, we teach math to children in shelter homes using interactive and hands-on methods.

Sastra

July 2022 - June 2024

NSS Leader

Thanjavur, India

• Increased annual blood donation camps and supported local temple events for crowd control and festival management.

• Strengthened community ties by addressing local hospital needs and supporting the temple, earning respect and recognition.

• Strengthened community ties by addressing local hospital needs and supporting the temple, earning respect and recognition.

Sastra

Aug 2019 - June 2022

NSS Volunteer Thanjavur, India

• Participating in community initiatives such as blood donation camps and shelter home cleanups.