

# Shreyas Sai Raman

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## Education

### Northeastern University

Master of Science in Artificial Intelligence

Coursework: Machine Learning, Algorithms, Foundations of Artificial Intelligence

Boston, MA

Expected May 2026

GPA: 3.83/4.0

### PES University

Bachelor of Technology, Computer Science and Engineering

Coursework: Machine Intelligence, Database Management Systems, Data Analytics

Bangalore, India

Dec 2020 - May 2024

GPA: 8.46/10.0

## Technical skills

**Languages:** Python, SQL, Java, C++

**Database:** MySQL, MongoDB

**Skills:** Machine Learning, Deep Learning, NLP, LLM, Statistical Modeling, Google Cloud Platform (Vertex AI)

**Libraries:** Pandas, NumPy, Pytorch, Matplotlib, TensorFlow, Scikit-Learn, Librosa, NLTK, Seaborn

**Visualization:** Excel, PowerBI, Tableau

## Work Experience

### Axai(Gogullak)

AI/ML Intern

Ahmedabad, India

Aug 2023 - Jan 2024

- Optimized fine tuning of large language models (LLMs) on Vertex AI by implementing model distillation and adjusting inference batch sizes, reducing cloud inference latency by 20% while cutting computational cost by 30%.
- Developed an end-to-end LLM orchestration pipeline using Flask, integrating real-time food, flight and geolocation APIs, and engineered dynamic, context-aware prompt templates, resulting in a 20% increase in response quality and relevance.

### Acmegrade

AI Researcher Intern

Bangalore, India

June 2022 - Aug 2022

- Built an NLP-driven chatbot using feedforward neural network with NLTK for tokenization and lemmatization, supporting 50+ intents and an active learning loop that improved intent recognition accuracy by 15% through continuous user feedback.
- Leveraged NLP techniques with libraries including JSON, Tensorflow and Numpy to enhance response generation, leading to 15% improvement in chatbot accuracy.

## Academic Projects

### A Federated Learning Approach for Disease Prediction and Remedies Recommendation

Jan 2023 - Dec 2023

- Implemented Federated Learning to pre-train the BERT model on clinical data from 10+ hospitals and practices, enabling privacy-preserving model.
- Facilitated collaboration across datasets by sharing only model updates, reducing the risk of data misuse while improving the model's accuracy by 15% in clinical text understanding.

### Speech Emotion Recognition

Oct 2022 - Dec 2022

- Designed a speech emotion recognition system using LSTM model, achieving accuracy of 93.637% by extracting MFCC features from audio with Librosa for classifying emotions such as sadness, happiness, fear, disgust and anger.

### Lung Cancer Prediction

Oct 2022 - Dec 2022

- Developed a lung cancer prediction system using various models like KNN, SVM and Random Forest Classifier, achieving 93% accuracy with Random Forest Classifier.
- Analyzed 276 patient records to identify key symptoms contributing to lung cancer, enabling early detection and improving model prediction efficiency by 20%.

## Publication

Published "[A Federated Learning Approach for Disease Prediction and Remedies Recommendation](#)" at IEEE 9<sup>th</sup> I2CT 2024.