

Srinivasa Sai Chava

+1 (857) 498-5012 | srinivassaichava@gmail.com | linkedin.com/in/chava_srinivasa_sai | github.com/Srinivasa-Sai-Chava

Education

Boston University

Master of Science in Artificial Intelligence

Boston, MA

Expected Dec 2026

Indian Institute of Information Technology Dharwad

Bachelor of Technology in Data Science and Artificial Intelligence

Dharwad, India

Nov 2021 – May 2025

Experience

Machine Learning and Flutter Trainer, Datavalley.ai

Vijayawada, India

Contract Trainer (Academic Workshops)

Jan 2025 - Jul 2025

- Conducted **hands-on ML and Flutter** workshops across partner colleges, creating **industry-aligned lab materials** and mentoring teams through **end-to-end project deployment**.
- Built and showcased a **production-grade Flutter app** featuring **role-based authentication**, secure ZegoCloud video, and **UPI payment integration**, demonstrating complete release workflows.

AI-Driven Text Analytics, IIIT Dharwad

Dharwad, India

Team Lead, Indian Language Machine Translation Evaluation

Aug 2023 – Jul 2024

- Led a comparative study on **Google Translator vs. AI4Bharat's IndicTrans2**, implementing translation workflows and conducting **Semantic Textual Similarity (STS)** evaluation on IIT Bombay's multilingual dataset.
- Demonstrated that **IndicTrans2 outperformed Google Translator** in preserving **semantic accuracy and linguistic nuances**, highlighting the potential of specialized **Indian-language MT frameworks**.

Projects

Boston Bus Equity

[GitHub](#)

Course Project for CASCS 506: Data Science Tools and Applications

Sep 2025 - Present

- Analyzing MBTA bus performance to **identify service equity gaps** by correlating historical ridership and reliability data with community demographics
- Developing a suite of machine learning models, including **time-series** and **tree-based methods**, to forecast delays and identify the key factors impacting service quality

RAG-assisted explainable hate speech detection model from GenerativeAI

[GitHub](#)

Under the guidance of Dr. Sunil Saumya | Associate Dean, IIIT Dharwad

Feb 2024 – Nov 2024

- Developed an **explainable hate and fake news detection system** integrating **Quantized LoRA (QLoRA)** fine-tuning with **Retrieval-Augmented Generation (RAG)** for multilingual social media text, achieving **78.4% Macro-F1** on benchmark datasets.
- Designed a **hybrid pipeline** combining **IndicXlit/IndicTrans2 transliteration, embedding extraction (BERT, XLM-R, Electra)**, and **LangChain-based retrieval**, reducing hallucinations by 60% and improving context relevance in hate-speech explanations.

FakeHate: Multi-Task Detection of Fake News and Hate Speech in Multilingual Text

[GitHub](#)

Team Lead under the supervision of Dr. Sunil Saumya, Associate Dean, IIIT Dharwad, and

Dr. Shankar Biradar, Assistant Professor, MIT Manipal

Aug 2023 – Apr 2024

- Developed a **multi-task deep learning model** for simultaneous **fake news and hate speech detection** on multilingual social media data using **IndicXlit** and **IndicTrans2** for transliteration and translation.
- Integrated embeddings from **BERT, mBERT, ALBERT, Electra, and XLM-Roberta** with **cluster-based feature engineering**, improving **Hate F1** from **81.97 → 97.15** and **Fake F1** from **70.16 → 76.21**, effectively enhancing harmful-content classification accuracy.

Publications

Hate Speech Detection in Telugu and Hindi Code-Mixed Text

[ACL Anthology](#)

- IIITDWD_SVC@DravidianLangTech-2024: Breaking Language Barriers; Hate Speech Detection in Telugu-English Code-Mixed Text(Sai et al., DravidianLangTech 2024)

Technical Skills

Programming & Frameworks: Python, C++, Java, PyTorch, TensorFlow, Keras, Scikit-learn, Hugging Face Transformers, BERT, RAG, LangChain, QLoRA, FastAPI, Streamlit

Developer & MLOps Tools: Linux, Git, Docker, Kubernetes, AWS, Azure, Apache Airflow, ElasticSearch, MySQL

Machine Learning & Data Science: OpenCV, Tesseract, Data Preprocessing, Feature Engineering, XGBoost, ONNX

Leadership and Extracurriculars

Core Team Member - Google Developer Students Club, IIIT Dharwad: Led **machine learning** and **app development** initiatives fostering innovation; organized workshops and hackathons to strengthen community engagement.

Cricket Team Representative - IIIT Dharwad: Represented the institute in inter-IIIT tournaments; contributed to team success and promoted **sportsmanship and camaraderie** through active participation in athletics.