

SREE BHARGAVI BALIJA

Machine Learning and Data Science Professional

PROFESSIONAL SUMMARY

Machine Learning and Data Science professional with expertise in AI, federated learning, and large language models.

EMPLOYMENT HISTORY

SOFTWARE ENGINEER

Mar 2025 - Present

Akdene Technologies

- ♦ Leading the ML team at Akdene Technologies, driving innovation in customer data analytics for next-gen financial planning solutions.
- ♦ Specialized in building scalable ML pipelines and deploying predictive models that optimize financial decision-making.

RESEARCHER

Apr 2024 - Feb 2025

US Meta Research Team

- ♦ Pioneered an optimized Hybrid Sparse Attention framework, leveraging sensitivity-based clustering to enhance transformer efficiency while maintaining state-of-the-art performance.
- ♦ Achieved a groundbreaking 50% reduction in memory footprint for transformer models by implementing advanced clustering techniques and sparsification, significantly accelerating large-scale NLP tasks.

SOFTWARE ENGINEER

Jun 2020 - Aug 2022

ServiceNow

- Worked on integrating multiple REST APIs with ITSM workflows for adding capabilities like Citrix cloud virtual systems access, Requested item flow to the Virtual bot and developed the NLU models for Conversational AI.
- Designed and developed the Dashboard which provides a prebuilt analytics for 8 metrics like customer satisfaction score, cost savings etc to demonstrate the actual business value achieved through the top ServiceNow products.
- Implemented Java API for periodic and user triggered compaction, job cancellation and managing compaction statistics.

EDUCATION

MASTER OF SCIENCE IN MACHINE LEARNING AND DATA SCIENCE

Jun 2024

University of California San Diego

BACHELORS OF TECHNOLOGY IN ENGINEERING

Jul 2020

Indian Institute of Technology Hyderabad

SKILLS

Python, Java, JavaScript, Angular, C++, R, Fortran, Prolog, Perl, Kotlin, Swift, PyTorch, Kubernetes, NLTK, NLP, Machine Learning, Deep Learning, Federated Learning, SQL, Django, ETL, Azure, GCP, Elasticsearch.

ADDITIONAL INFORMATION

PUBLICATIONS

- ♦ Building Communication Efficient Peer-to-Peer Federated LLMs with Blockchain, AAAI, Stanford University
- ♦ Unified Multimodal Sustainable Federated Agentic model for Healthcare, Prof. Praneeth, MIT
- ♦ CPTQuant - A Novel Mixed Precision Quantization Techniques for Large Language Models
- ♦ FedNAM+: Executing Interpretability Analysis using Novel Conformal Predictions method, CVPR 2025 (In review).
- ♦ FedNAM: Executing Interpretability Analysis in Federated learning Context

AWARDS AND CERTIFICATIONS

- ♦ Skill development incentive program award, ServiceNow 2021
- ♦ Academic excellence award, IIT Hyderabad 2018.
- ♦ Founder of AutoPatch+, presented at MIT AI summit 2025