Prianshu Jha

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Experience

SarvM.ai Oct 2024 – Present
AI Intern *Remote*

- Improved fuzzy string-matching precision by 15% through advanced text processing and encoding optimization.
- Fine-tuned pre-trained models for Voice Synthesis and Cloning, improving output quality by 10% (MOS).
- Researched and integrated advanced AI algorithms for dialect-independent audio transcription, product search optimization.
- Deployed AI models using PyTorch and TensorFlow, reducing inference latency by 25%.
- Reduced AI model training time by 20% through efficient resource allocation and workflow enhancements.

Education

Thapar University June 2024
Bachelor of Engineering in Computer Science *GPA: 7.55/10.0*

Skills

Languages: C++, Java, Python, SQL, Bash
Tools and Frameworks: Git/GitHub, Linux, Excel, Flask, Colab, WSL, Terraform
Technologies: Machine Learning, Data Structures & Algorithms, Deep Learning
Libraries: Pandas, NumPy, scikit-learn, TensorFlow, Pytorch, NLTK

Projects

NetProbe: Deep Learning-Driven DDoS Detection with a Two-Tiered Mitigation Strategy
Graph Neural Networks, Bi-directional LSTM, CICDDoS2017, Apache2 May 2024

- Led development of a Deep Learning DDoS Detection system using Graph Neural Networks, time series-based models like Bi-directional LSTM models with attention layers and ensemble learning-based models.
- Integrated with Apache server for attack simulations and created a custom dataset from real-time packets.
- Implemented automated IP blocking for real-time defense with 93% accuracy, using a two-layer approach, transfer learning, and ensemble modeling.
- Repository: github.com/prianshujha/NetProbe
- **Publication:** "NetProbe: Deep Learning-Driven DDoS Detection" at ICDCN 2025, ACM.

Fed-Avis: Federated Learning Anti-Vehicle Infiltration System
TinyYOLOv4, MobileNetV2, Azure IoT Hub, Raspberry Pi Dec 2023

- Developed cost-efficient system to detect non-military vehicle intrusion, reducing costs by up to 50%.
- Leveraged federated learning for continuous model improvement, boosting accuracy by 20% per cycle.
- Employed lightweight deep learning models with Azure IoT hub and Raspberry Pi.
- **Publication:** "Fed-Avis" at ICDCN 2024, ACM **doi:10.1145/3631461.3631957**

File Encryption Utility
Java, Maven, AES-128, JUnit, Log4j, GitHub Actions Feb 2025

- Designed a secure command-line utility for file encryption/decryption using AES-128 with multi-threading support, efficient I/O streams, and Java Security package implementation.
- Integrated DevOps practices including CI/CD pipeline with GitHub Actions, Docker containerization, and automated JUnit testing.
- Repository: github.com/prianshujha/file-encryption-utility

Awards and Leadership

Best Paper Award - MLBSS Workshop, ICDCN 2025, IIT Hyderabad 2025
ACM Professional Membership - Awarded by ACM in recognition of research publication 2024
Thapar Mathematical Society - Member Aug 2021 – June 2024
Thapar Institute Counselling Cell - Mental Health Student Ambassador Mar 2021 - June 2024