Md Adnan Baqi

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PROFESSIONAL SUMMARY

Python Developer & AI Engineer building scalable systems, generative AI pipelines, and research-backed ML products using PyTorch, FastAPI, and distributed computing. Passionate about turning cutting-edge research into real-world AI applications with high efficiency and impact.

PROFESSIONAL EXPERIENCE

IMMUTABLE AI LABS, CA, UNITED STATES   Feb 24 - Present
AI & ML ENGINEER

Designed and implemented a high-performance distributed system for AI model training, improving compute efficiency by **89%** and scaling to **N+1** nodes.

METEX LABS, WOODLAND HILLS, CA, UNITED STATES   Nov 2023 – Feb 2024
GENERATIVE AI ENGINEER

Developed a generative AI pipeline for creating custom QR codes using text-to-image models, achieving **80%** scan-accuracy and reducing per-image generation time to **0.4s** from **50s.**
Contributed to backend integration of Stable Diffusion for "Golab," cutting end-to-end image serve latency by **42%.**

AI INTEGRATIONS ENGINEER   Sep 2023 – Nov 2023

Delivered a custom AI model via advanced merging techniques, reducing model size by 22% while boosting inference throughput by 18%.

Conducted research on Latent Consistency Models (LCMs), demonstrating 53% approximately faster inference at equivalent accuracy in benchmark tests.

EDUCATION

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE   Oct 2021 – June 2025

INTEGRAL UNIVERSITY, LUCKNOW, INDIA
Relevant course work: NLP BASED DISASTER TWEET
CGPA: 8.4

LANGUAGES

Frameworks & Libraries: PyTorch, FastAPI, Django, LangChain, React, Hivemind, Transformers.

Tools & DevOps: Docker, Git, WebSockets, NGINX, Postman, MongoDB, PostgreSQL.

ML/AI Skills: RAG, LLMs, SLM, NLP, NER, Generative AI, Prompt Engineering, LCM, Stable Diffusion, OpenAI.

RESEARCH & PUBLICATIONS

Paper: A Hybrid Transformer Based Model for Disaster Tweet Classification Using BERT and RoBERTa
Publisher: Journal of Dynamics and Control
Summary:
Developed and evaluated a dual-encoder transformer model, achieving *92.3% accuracy* & 93.1% F1 on disaster tweet classification. Focused on improving context representation using pooling and focal loss.

STARTUPS & PROJECTS

- **BackdropAI:**   **LIVE**
  AI-powered generative tool for text-over-image creation using & font styling.
- **Pingo:**   **LIVE**
  Real-time internet speed test web app using WebSockets & Node.js for bandwidth simulation.
- **Bechdo.in:**   **LIVE**
  Next-gen marketplace redefining how India buys and sells with KYC based authentication, speed and simplicity.
- **Distributed-training:**   **LINK**
  Built a distributed training system using Hivemind and PyTorch to enable collaborative model training across consumer GPUs with fault-tolerance and gradient syncing.
- **ClaimCheck:**   **LINK**
  An AI-powered web app that uses RAG to verify patent originality by semantically comparing user submissions with existing patents.

CERTIFICATIONS

- **IBM GENERATIVE AI**   **VERIFY**
- **GOOGLE INTRODUCTION TO GENERATIVE AI**   **VERIFY**
- **IBM PYTHON FOR DATA SCIENCE, AI AND DEVELOPMENT**   **VERIFY**

LANGUAGES

- **English (Fluent)**
- **Hindi (Advanced)**
- **German (Basic with GPT Assistance).**