JIGNESH SHIYAL

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SUMMARY

Data Scientist with 3+ years of experience building AI/ML-powered production systems in NLP, Speech Recognition, Computer Vision, and Document Intelligence. Strong expertise in fine-tuning transformer models (OpenAI Whisper, DistilBERT, CLIP), optimizing inference with ONNX, CTranslate2, and deploying scalable pipelines using Docker, FastAPI, Kubernetes, and AWS.

SKILL

Languages: Python, SQL, JavaScript

Cloud & Monitoring: AWS (EKS, EC2, S3), Grafana, Loki

Machine Learning / Deep Learning: Whisper, DistilBERT, CLIP, CNNs, ONNX, CTranslate2, Face Recognition, Table

Extraction, Image Embeddings, Mediapipe, Speech-to-Text, Text Classification, Semantic Search, Transformers

Backend & Deployment: FastAPI, Streamlit, Docker, Kubernetes (AWS EKS), RabbitMQ

Databases: ChromaDB, PostgreSQL, Vector Database

WORK EXPERIENCE

CREDITT+ INDIA

Data Scientist Jan 2024 – Present

- Bank Statement Analysis AI pipeline (Table Transformer + DistilBERT), 4× faster, 35% cost savings, no third-party APIs.
- Face Matching (KYC) CNN + Mediapipe verification, 40% faster, 25% more accurate onboarding.
- Video-Audio Compliance Real-time system (Face Recognition + Whisper), **2**× **lower latency**, **20% better accuracy**, no external providers.

CYBERCOM CREATION INDIA

Software Engineer

Feb 2023 - Jan 2024

- Forecasting demand Developed **time-series** demand forecasting models in Python for bakery products across regions, improving inventory planning **accuracy by 30%**.
- Product matching Implemented image similarity and product-matching models with **MobileNet** and **InceptionNet**, reducing manual catalog mapping **effort by 50%**.

PROJECTS

FACEKYC - [Mediapipe, Javascript, Face-matching, ChromaDB]

Github Link

• Browser-based **KYC verification system** with selfie guidance and face matching. **JavaScript**-driven frontend captures user selfies and guides framing and alignment.

SMARTRESUMEAGENT - [Langchain, Langfuse, FastAPI, ChromaDB, Javascript]

Github Link

AI-powered multi-agent resume customizer that extracts, ranks, and tailors resumes to job descriptions with ATS-aware optimization

FASTTUNEWHISPER - [Pytorch, Whisper, CTranslate2, FastAPI, Streamlit]

Github Link

• Production-ready speech-to-text system **fine-tuned** on **Whisper** (small), optimized using **CTranslate2**, with **FastAPI** backend and Streamlit frontend. Word Error Rate (WER) dropped from ~114.75% to ~55.60% post fine-tuning.

EDUCATION

GOVERNMENT ENGINEERING COLLEGE BHAVNAGAR [B.E - 8.7/10.0]

Jul 2019 - Jul 2023

ACHIEVEMENT