

YASH SHAH

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EDUCATION

Master of Science in Information Technology (GPA: 4.0/4.0)

Arizona State University

May 2025

Arizona, USA

B.Tech in Computer Engineering (GPA: 9.0/10.0)

Charotar University of Science and Technology

April 2023

Gujarat, India

EXPERIENCE

IT Business Analyst Intern

June 2025 - Present

Zydus Pharmaceuticals USA Inc.

New Jersey, USA

- Develop a multi-agent AI assistant in Microsoft Teams that routes sales queries through modular LLM and SQL validator agents to fetch Microsoft Fabric data, reducing manual report lookup time across sales operations.
- Enforcing security by Azure AD auth and agent-level SELECT-only filtering to keep queries safe and SLA-reliable.
- Streamline reporting with USPS-normalized PySpark addresses, fuzzy-matching strategies to achieve over 93% linkage across 600K+ records, align 25K+ mismatches, and validate results using OpenAI for quality assurance.
- Reconcile 1M+ SAP transactions using conditional logic to fix customer data for compliance and reporting.
- Built a Python pipeline to process 100+ drug PDFs with Camelot and pdfplumber for analysis in Microsoft Fabric.

Data Engineer

January 2024 - May 2025

Arizona State University

Arizona, USA

- Cleaned and standardized Excel-based student records for downstream Salesforce ingestion, then built a WorkOS UI using GraphQL + REST APIs to pull registrant counts and generate reports, reducing turnaround time by 52%.
- Contributed 10+ new feature implementations for the Smart DART app, leveraging React, TypeScript, Node.js, and applied AWS Lambda and DynamoDB for distributed processing, achieving a 2.6% latency reduction.
- Built Flask-Airtable inventory system to track 500+ SKUs, resolving sync delays and reducing manual workload.

Software Engineer Intern

June 2024 - August 2024

New York City Department of Finance

New York, USA

- Scripted modular SharePoint web parts utilizing React, SPFx, and Fluent UI with SPHttpClient integration to render list data and support metadata-based filtering, improving document retrieval turnaround by up to 35%.
- Deployed a React-based intake form with Formik and Yup for responsive form checks, routed data to SharePoint through Power-Automate, and enforced SharePoint permissions to maintain secure access control.
- Cleaned 50K+ records in Python and auto-mapped them to SharePoint via Power Automate with lossless transfer.

AI Engineer

December 2022 - April 2023

AI Genesis Glib

Gujarat, India

- Built Rasa conversational agent with YAML-based intents, entity extraction, and FastAPI endpoints to automate flight booking, seat selection, and payment tasks, reducing manual support escalations.
- Migrated NLP stack to LangChain and Pinecone, improving routing to ~95% intent and ~97% response accuracy.
- Validated system through pytest integration tests and log analysis, refining routing logic across 100+ scenarios.

PROJECTS

Coffee AI Agent ([Github](#)) | Python, LLaMA 3.1, Pinecone, React Native, Firebase, RunPod

August 2025 - Present

- Design a modular AI chatbot using LLaMA 3.1 and agent based architecture (guard, classifier, recommender, order handler), deploying on RunPod GPUs to enable real time interactions with 3x lower response latency.
- Build RAG pipeline with OpenAI embeddings, Pinecone, and React Native-Firebase app for grounded LLM queries.

Book Recommendation System ([Github](#)) | Python, LLMs, LangChain, Chroma, Gradio

May 2025 - July 2025

- Implemented zero-shot classification with pretrained LLM embeddings to semantically encode 5,200+ book descriptions, achieving 78% fiction/non-fiction accuracy through cosine similarity based inference.
- Trained transformers on 7 emotion sentiments, achieving 66% accuracy and generating top-16 recommendations.

YouTube Trending Video Analysis ([Github](#)) | Python, AWS, SQL, ETL

January 2024 - April 2024

- Implemented an ETL pipeline on AWS (S3, Lambda, Glue, Athena) to ingest, transform, and analyze 100,000+ YouTube videos from multiple global regions, converting raw JSON into Parquet format for scalable analysis.
- Established an Amazon QuickSight dashboard to visualize key video metrics and highlight engagement trends.

TECHNICAL SKILLS

Languages & Frameworks: Python, SQL, R, JavaScript, TypeScript, Express.js, Node.js, React, PowerShell

AI/ML & NLP: Transformers, Hugging Face, LangChain, Scikit-learn, OpenAI API, LLaMA

LLMs & Vector DBs: FAISS, Pinecone, Chroma, Rasa

Model Ops & Deployment: FastAPI, Flask, Streamlit, Gradio, Docker, Redis, Celery, REST APIs

Cloud & BI Tools: AWS, GCP, Microsoft Fabric, Azure, Snowflake, Airflow, Power BI, Tableau, QuickSight, Looker Studio