

Muhammad Kashif Irshad

AI Integration & Full-Stack Engineer | React, Python, RAG, APIs

Available through Upwork | Lahore, Pakistan (UTC+5) | Capacity and time-zone overlap by agreement

PROFILE

I build AI integrations and the applications around them: retrieval over business documents, source-grounded answers, tenant isolation, usage metering and production failure handling. My 18+ years span Python/React development, data pipelines, warehouses and reporting.

SELECTED CONSULTING AND PROJECT DELIVERY

Employer and client identities withheld for confidentiality. Selected work spans consulting, team delivery and earlier employed roles.

AI products: document assistant, AI CRM and AI video pipeline

2025 - present | Independent product development

- Built Irshad AI Employee: document-grounded RAG across WhatsApp, an embedded widget and a web portal. Django REST on Cloud Run, PostgreSQL/pgvector, vision OCR, tenant isolation and usage metering.
- Indexed 946 statutes and 2,503 court judgments, approximately 117,000 chunks. Supports English, Urdu and Roman Urdu. The published evaluation's manual audit found zero fabricated citations; this is not a guarantee for every production answer.
- Built Irshad AI CRM: React/TypeScript sales workflows and customer, product and inventory views, with an AI analyst over PostgreSQL/BigQuery data.
- Built an AI video pipeline for IrshadOS Folk Tales: a Python 2D animation engine with ElevenLabs Urdu/English voices, Whisper pronunciation checks and automated lip-sync, rendering and Shorts. 30+ films; 2,000+ YouTube subscribers in its first weeks.

AI-enabled CRM and internal SaaS platform

Jul 2025 - present | Remote contract | Full-stack development lead

- Deliver OpenAI-assisted SMS/email drafting, vector retrieval and transcript-driven CRM tasks with source-based duplicate prevention. Build FastAPI/Cloud Run services and React/TypeScript interfaces using BigQuery and Firestore.
- Implement role-based access, scheduled actions, retries and Cloud Build CI/CD. Maintain vector-store records in BigQuery for discovery, synchronization and audit.

Regulatory registration and environmental monitoring

Nov 2024 - Jun 2025 | Full-stack project delivery

Built a public-facing registration system with approval stages, role-based access and an installable PWA using React, Django and PostgreSQL; also delivered an air-quality dashboard.

Data pipelines and analytics applications

Oct 2019 - present | Selected consulting and team-delivered projects

- Canada, nine months: QuickBooks Desktop, Fishbowl and Excel to BigQuery; .NET extraction, historical/nightly loads, SQL cleaning and Power BI. Completed with five-star feedback.
- UK: CRM and data-approval applications, plus Firebase-to-BigQuery reporting. US: marketing pipelines using Stitch/Fivetran, dbt and Airflow/Composer, including anomaly checks and alerts.

Earlier enterprise projects

2006 - 2020 | Data engineering, architecture and software delivery

Analytics warehouses (Nov 2019 - Oct 2020): Snowflake, Azure Data Factory/Data Lake, Databricks, PySpark/Scala and Power BI through a delivery team. Smart-metering architecture (Dec 2017 - Oct 2019): PostgreSQL, OBIEE, ODI and SSIS. Healthcare and business workflows (May 2010 - May 2016): database design, ETL and reporting. Earlier work (2006-2010): healthcare BI, leasing and transaction-processing databases.

TECHNICAL SKILLS

AI: OpenAI APIs, RAG, embeddings, pgvector, vector stores, source citations, vision OCR, retrieval evaluation and token/cost control.

Engineering: Python, Django REST Framework, FastAPI, React, TypeScript, Node.js/Express, React Native, REST APIs, webhooks, OAuth and JWT.

Data and cloud: BigQuery, SQL, PostgreSQL, Snowflake, Redshift, dbt, Airflow/Composer, Fivetran, PySpark, Power BI, Looker Studio, GCP, AWS, Azure, Docker, Kubernetes and CI/CD.

EDUCATION AND SELECTED CREDENTIALS

BS (Hons) Computer Science, NUCES-FAST, 2001-2005. Upwork Skill Certification - React Front-End Development (2024); Oracle BI Foundation Suite 11g Certified Implementation Specialist (2016). Professional learning: AI Engineering Essentials and Microsoft Azure Databricks for Data Engineering (Microsoft/Coursera, 2024).