

AHMED RAOOFUDDIN

Target Role: AI Engineer • Full-Stack Developer • Solutions Engineer • Software Engineer (Java Spring Boot/Python/React/Next.js)
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SUMMARY

AI Engineer & Full-Stack Developer building production agentic AI systems, multi-agent orchestration platforms, and LLM/RAG pipelines at cloud scale. Skilled in Claude Opus/Sonnet 4.6, GPT-5, Gemini 2.5 Pro, MCP, LangChain, LangGraph, and full-stack development using Java/Spring Boot, Python/FastAPI and React/Next.js. Proven record of architecting scalable cloud systems (Docker, Kubernetes, AWS/GCP), shipping AI-powered ERP and automation platforms, and delivering products that increase qualified leads by 35%, cut screening time by 80% and achieve 90% automated test coverage. Committed to solving business challenges through AI innovation in Dubai's tech market.

Stack: Agentic AI, MCP, LangChain/LangGraph, LLMops/MLOps (MLflow, Airflow, SageMaker), Vector DBs (FAISS, Pinecone, Weaviate, Milvus), hybrid/BM25+rerank, evaluations (LangSmith, Langfuse, RAGAS), Java/Spring, Python/FastAPI, Next.js, Kafka, Redis, Docker/K8s, AWS/GCP. BPM-style workflow design: process modeling/BPMN concepts, validated forms, business rules, queues/schedulers, REST/DB integrations, audit trails.

CORE COMPETENCIES

- **AI & ML:** LLMs (Claude Opus/Sonnet 4.6, GPT-5, Gemini 2.5 Pro), Agentic AI, RAG/Agentic RAG, MCP, LangChain, LangGraph, CrewAI, Multi-Agent Orchestration, Prompt Engineering, AI Guardrails, Tool Use/Function Calling, Embeddings, Vector Search, NLP, Transformers
- **Data:** PostgreSQL, MySQL, MongoDB, Neo4j, Redis, Elasticsearch, PL/SQL
- **MLOps & Observability:** MLflow, Airflow/Dagster, SageMaker, Model Registry, Feature Store, LangSmith
- **Security & QA:** CSP, HSTS, SRI, RBAC, JUnit, SonarQube, Checkmarx, Snyk, Test Coverage
- **Full-Stack:** Java, Spring Boot, Python, FastAPI, REST/GraphQL, React, Next.js, TypeScript, Angular, Node.js
- **DevOps & Cloud:** Docker, Kubernetes, AWS, GCP, GitHub Actions, Jenkins, RabbitMQ, CI/CD, Linux, Nginx, Cloudflare
- **Tools & Soft Skills:** Figma, UI/UX, Git, RabbitMQ, Firebase, SonarQube, VS Code, Jupyter; Leadership, Team Collaboration, Agile & Scrum, Project

EDUCATION

Bachelor of Engineering (B.E.) in Computer Science Engineering – Chaitanya Bharathi Institute of Technology (O.U), Hyderabad, India (May 2023)

- CGPA 8.52/10; Coursework: Data Structures, Machine Learning, AI, Operating Systems, Database Systems, Web Development
- Academic Project: GAN denoising; benchmarked vs classical filters; F1 at least 0.99 on custom noisy dataset (at least 99% accuracy)

Central Board of Secondary Education (CBSE), International Indian School, Riyadh, Saudi Arabia (Apr 2019)

- Aggregate: 91.8/100; Specialized in Mathematics, Physics, Chemistry & Computer Science

WORK EXPERIENCE

AI Engineer – Metamorphic Design Company, Dubai, UAE | Feb 2026 – Present

- Owned end-to-end full-stack engineering across 10+ systems including MetaForge ERP (Sales/Design Pipeline + Project Management), vendor procurement platform, company website, VR/3D visualization pipeline, and AR glass integration for interior design clients
- Built intelligent automation suite handling full-stack delivery with 10+ n8n workflows, voice-enabled assistants (Twilio/VOIP) for HR, lead nurturing, and project management; implemented document control systems with Google Drive and vector database integration
- Architected sales & marketing technology stack including CRM pipeline management (Pipedrive), Meta API campaign analytics, Claude AI-powered SEO content generation, and branded content strategy
- Leveraged Microsoft Foundry AI, Google Vertex AI, and enterprise AI platforms for client-facing solutions; managed cross-functional coordination across design, procurement, and technology teams
- **Core Tech:** React, Next.js, Node.js, Python, Supabase, Sanity CMS, Pipedrive, Twilio, VOIP, n8n, Three.js, AR/VR, Vercel, Claude AI, Google Vertex AI, Microsoft Foundry AI, PostgreSQL, Docker, Vector DBs.

AI Engineer – OffplanProperties.ai/Zalinos Brokerage LLC, Dubai, UAE | Jan 2025 – Jan 2026

- Shipped production LLM/RAG services (voice + multilingual) for property search; +35% qualified leads, -80% manual screening; p95 < 800 ms.
- Built Java Spring Boot microservices + Python FastAPI workers with Kafka/Redis; sustained 1.5–2.0k req/min during campaigns without errors.
- Implemented LLMops/MLOps (MLflow, Airflow, SageMaker, LangSmith/Langfuse, RAGAS) with eval harnesses and prompt/version tracking.
- Deployed on AWS/GCP with Docker/K8s, Nginx, Cloudflare; blue/green rollouts and CI/CD (GitHub Actions) reduced change failure by 40%.
- Engineered NLP workflows & advanced filtering logic; integrated analytics for system self-improvement and user intent analysis, managing full-stack deployments via CI/CD

- **Core Tech:** Python, Java, Next.js, Angular, Spring Boot, Generative AI, PostgreSQL, GraphQL, LangChain, NLP, Docker, Kubernetes, Railway, CI/CD, Hostinger, Cloudflare, Analytics, Voice & Multilingual Systems.
- Built multi-step lead/case workflows with rules, retries, and state logs; integrated Twilio/CRMs/MySQL via REST; scheduled jobs via n8n/cron.

Solutions Engineer – REST Information Technology, Riyadh, Saudi Arabia | Nov 2024 – Jan 2025

- Built ERP integrations (MySQL/MongoDB) with resilient REST patterns; –40% post-deployment issues, +30% solution fit in presales.
- Customer-facing technical demos converting to pilots at 35%+ win rate.
- Integrated RESTful APIs & data pipelines across SQL & NoSQL systems (MySQL, MongoDB), reducing post-deployment issues by 40% and accelerating onboarding cycles
- Translated business needs into ERP features using SQL and NoSQL systems, delivering product demos and technical walkthroughs
- Partnered with sales & technical teams to ensure smooth implementations, optimising system performance and minimising technical issues
- **Core Tech:** ERP, SQL, NoSQL, REST APIs, Presales, Node.js, System Integration, MySQL, MongoDB, Business Analysis, B2B SaaS.

Full Stack Software Developer (Intern + Full Time) – Valuelabs Solutions LLP / Shutterfly Project, Hyderabad, India | Dec 2022 – Dec 2024

- Designed Spring Boot services with Hibernate/JPA; –30% API latency (p95) and –25% error budget burn via caching and connection pooling.
- Standardized security (Spring Security, OAuth2) and SAST/DAST gates (Checkmarx, Snyk) resolving 90% vulns pre-prod.
- JUnit/Mockito test suite to ~90% line coverage; SonarQube quality gate maintained across microservices.
- Angular upgrade path and API contract hardening (OpenAPI), cutting regression defects by 25%.
- Created RESTful APIs & dynamic web components using Angular; achieved a 30% API performance boost and 25% user experience improvement.
- **Core Tech:** Java, Spring Boot, Hibernate, Angular, REST APIs, JUnit, SonarQube, SQL, JDBC, Checkmarx, Snyk, AI Chatbot (AiDE), CI/CD, Testing Automation.

PROJECT EXPERIENCE

Cortivex, AI Agent Pipeline Orchestration | Mar 2026 – Present

- Built a production-grade multi-agent orchestration system (100% TypeScript) with DAG-based pipeline execution, a self-learning engine (34% faster after 50 runs), and filesystem-based mesh coordination preventing agent conflicts across concurrent sessions
- Developed 17 MCP tools, 15 Claude Code skills (13,500+ lines), and 20+ agent node types across quality, security, testing, DevOps, and documentation categories with a React dashboard for pipeline editing, live execution streaming, and metrics visualization
- Implemented OWASP-aligned security hardening (3,500+ lines) with SHA-256/ed25519 tamper detection, AES-256-GCM encrypted audit trails, PII/secret auto-redaction, and comprehensive input validation
- **Tech:** TypeScript, Node.js, React 19, Vite, Tailwind CSS, Express, WebSocket, D3.js, Recharts, YAML Pipelines, MCP Protocol

MetaForge ERP & Vendor Platform, Metamorphic Design Company | Feb 2026 – Present

- Architected a full-stack ERP system (Web + Mobile) with two segments: Sales & Design Pipeline (CRM/Pipedrive lead intake, client moodboard management, VR render assignments, design team task routing, analytics dashboards) and Project Management (purchase orders/LPOs, material requisitions from site supervisors, procurement workflows)
- Built a Vendor Tender management system with secure one-time links (24-hour expiry), procurement scheduling, form management, and AI-powered vendor scoring for optimal supplier selection
- Developed document control workflows ensuring confidential data handling, role-based access, and systematic file organization across project stages
- **Tech:** React, Node.js, Pipedrive API, PostgreSQL, Mobile UI, AI Scoring, VR Rendering Pipeline, Document Control Systems

Metamorphic Digital Platform & Intelligent Automation Suite | Feb 2026 – Present

- Built the company website with Next.js integrating Resend, Supabase, Google Recaptcha, Sanity CMS for SEO, and Vercel deployment; implemented Claude-powered SEO content generation, admin panel, intelligent support assistant (Maya), and estimation client
- Developed voice-enabled intelligent assistants for HR automation, lead nurturing, and project management via Twilio/VOIP; built 10+ n8n automation workflows for calendar scheduling, Google Drive document control, and vector database integration
- Created a VR/3D visualization pipeline with production-grade 8K renders and Aria Gen 2 AR glass integration for client on-site measurements, cost estimates, and immersive design experiences
- **Tech:** Next.js, Supabase, Sanity CMS, Vercel, Claude AI, Twilio, VOIP, n8n, Three.js, AR/VR, Python, Vector DBs

AI Agent Platform for Real Estate | Jan 2025 – Jan 2026

- Developed full-stack conversational AI agent using LangChain & GPT-based NLP with multilingual support, voice/image uploads, OTP verification & AI-driven SQL generation for lead capture
- Built an omnichannel conversational agent that handles buyer discovery, multilingual Q&A, phone OTP, lead capture, and AI-generated SQL for property and project search
- Implemented a four-stage pipeline: intent engine, query engine, search conversation engine, and LLM fallback with guardrails for prompt injection and PII redaction
- Built scalable backend & frontend stacks (Next.js, Node.js, Supabase, MySQL) and handled end-to-end DevOps with CI/CD & Cloudflare
- Delivered real-time buyer intent understanding and dynamic property querying, replacing traditional agent functions
- **Tech:** LangChain, GPT, Next.js, Node.js, Supabase, MySQL, CI/CD, Cloudflare

AI RAG Chatbot | Jan 2025 – Jan 2026

- Built a retrieval-augmented generation system with a FastAPI backend and a TypeScript Next.js frontend. Features include knowledge base creation, document upload, chunking, embeddings, semantic search, and chat with cited sources and streaming responses. Includes backend and frontend workspaces, Docker Compose files, SQL migrations, Nginx configs, and quick-start scripts

- Exposed a clear API surface for knowledge bases, documents, and chat sessions with environment-based configuration and health checks. Provided developer runbooks, troubleshooting guides, and smoke test scripts
- Implemented guardrails for prompt injection and hallucination checks, configurable context window and chunk sizes, and an evaluation harness to verify retrieval precision before release
- **Tech:** Python, FastAPI, LangChain, embeddings, vector search, ChromaDB or equivalent, Next.js TypeScript, Docker, Swagger, Nginx

SEO Automation and A2S Growth Engine | Jan 2025 – Jan 2026

- Architected the Agent-to-SEO system and generated more than 300,000 long-form real estate pages at production scale. Pages are parameterized by city, area, property type, bedrooms, price band, and ROI tier and include dynamic tables, unique FAQs, and buyer intent summaries
- Built an end-to-end pipeline in n8n that performs content generation, metadata enrichment, Midjourney image creation, structured internal linking, and Botble CMS publish with rollback. Added Zapier approval gates, idempotent publish queues, and audit logs
- Enforced quality gates and SEO operations at scale. Global deduplication, template validation, slug and canonical rules, JSON-LD schema, hreflang generation, segmented sitemap and sitemap index files, index-notify to search engines, scheduled refreshes, and broken link repair
- **Tech:** n8n, Zapier, Botble CMS, Midjourney, OpenAI, Cloudflare, MySQL, Webhooks, Cron

Virtual Fitting Room with Texture Mapping | Jan 2025 – Jan 2026

- Shipped a Django and Three.js application that maps garment textures to a mannequin using PBR lighting and ACES tone mapping. Viewer supports orbit, zoom, pan, and instant model or outfit swap
- Built an asset pipeline that generates torso masks and atlases, handles image normalization and resizing, and maintains a deterministic file layout for preview and cache reuse. Documented an upgrade path to SMPL/SMPL-X body models for better fit simulation
- Packaged a one-command Docker start for demos with environment presets and static asset mounting
- **Tech:** Python, Django, Three.js, OpenCV, Pillow, Docker

Platform Performance, Security & Data Ingestion Revamp | Jan 2025 – Jan 2026

- Integrated an AI recommender and an AI comparison tool that use schema-aware prompts aligned to database categories and amenities. Produced exportable comparison briefs for sales and implemented caching for stable p99 latency
- Enforced performance budgets on key routes (Lighthouse ≥ 95 , CLS ≤ 0.05 , TBT ≤ 150 ms) via Cloudflare CDN, responsive images and preconnect
- Revamped 100+ files of real estate CMS to modernise dashboards, add modules & dynamic listings and ensure compliance with GDPR/SEO standards
- Built no-/low-code CRM ingestion with schema validation, deduplication, geocoding and media normalization; implemented retry, idempotency and full audit trails
- Designed property-scoped credit quotas and rate-limits with time-window metering, reconciliation jobs, fintech billing hooks and admin dashboards for anomaly and cost-to-serve visibility
- **Tech:** Botble CMS, PHP, Cloudflare, Next.js, Nginx, Lighthouse CI, Webpack/ESBuild, Snyk, Checkmarx, Python FastAPI, MySQL, Supabase, Cloudflare R2, Node.js, Cron, Redis, Fintech APIs (**case/queue management aligned to BPM practices**).

Automation Suite System (n8n) | Dec 2024 – Jan 2026

- Designed more than 10 production workflows including WhatsApp sessioning and OTP, multi-channel MCP-style orchestration, Google Drive to vector database ingestion for knowledge agents, AI Tutor flows, content QA and refresh jobs, and scheduled platform health checks
- Standardized retries, idempotency keys, webhook signatures, audit trails, and run health dashboards. Added human-in-the-loop approvals and Slack/CRM notifications for high-intent events
- Implemented secrets management, environment separation, back-pressure control for rate-limited APIs, and disaster recovery playbooks
- **Tech:** n8n, Webhooks, Twilio WhatsApp, Supabase, MySQL, Redis, Cron, Cloudflare

Java Spring Boot HR Portal | Jul 2024

- Built a full-stack HR system with Spring Boot 3 REST APIs, DTO and mapper layers, transactional services, and global exception handling. Angular 17 client with reactive forms and Bootstrap for responsive layouts
- Added JasperReports for department-level PDF exports. Included Postman collections and run scripts for Windows and Linux to verify end-to-end flows
- Implemented RESTful APIs using Spring Boot to improve data retrieval by 25% and enhance performance
- **Tech:** Java 17, Spring Boot 3, JPA, H2, JasperReports, Angular 17, Maven

Employee Management System | Jul 2023

- Developed Angular/Spring Boot employee management system enabling CRUD operations and used SQL & advanced queries to efficiently manage structured data
- Created responsive UI using Angular Material & Bootstrap, achieving 30% increase in user satisfaction
- Implemented RESTful APIs using Spring Boot to improve data retrieval by 25% and enhance performance
- **Tech:** Angular, Spring Boot, SQL, REST APIs, Responsive UI, Agile Development

SKILLS

- **Languages & Databases:** C/C++, Java, Python, TypeScript, HTML/CSS, MySQL, PL/SQL, Oracle, PostgreSQL, MongoDB, Redis, Neo4j, Firebase, Elasticsearch
- **Frameworks & Libraries:** Spring Boot, FastAPI, Django, React, Next.js, Angular, Express, Flutter, Node.js, GraphQL, LangChain
- **Technologies & Tools:** LLM Fine-tuning, Generative AI, Docker, Kubernetes, AWS, GCP, Redis, Kafka, Supabase, Twilio, Microservices, CI/CD, DevOps, Postman, NLP & Voice AI, Prometheus, OpenTelemetry, Feast (feature store), Langfuse
- **Testing & Collaboration:** JUnit, SonarQube, Checkmarx, Snyk, Git, Jira, Confluence, Figma, Trello, Postman, VS Code, Tableau, Jupyter
- **Interpersonal & Leadership:** Client Engagement, Leadership, Communication, Team Collaboration, Agile & Scrum, Project Management, Problem Solving, Presentations
- **Certifications:** AWS Solutions Architect Associate; AWS Cloud Practitioner; IBM AI Engineering Professional Certificate; Google Cloud Professional Machine Learning Engineer; NVIDIA Deep Learning Institute (DLI) Certified; Microsoft Azure AI Engineer Associate; DeepLearning.AI LangChain/LangGraph Specialization (Coursera); Google Digital Marketing; Toastmasters, Public Speaking & Leadership