
Salman Razzaq

AI Engineer & Engineering Leader

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AI engineering leader building production systems for institutional finance. My work spans agent runtimes, document and entity intelligence, retrieval, evaluation, and the infrastructure behind enterprise workflows. I lead engineers while contributing directly to architecture and implementation, with experience across an early-stage fintech and a global financial enterprise.

Professional experience

Hypha | Engineering Manager

Oct 2025 - Present | New York, NY

- Lead eight engineers while remaining hands-on across the agent platform, document intelligence, and evaluation infrastructure for institutional finance.
- Built reusable agent execution in isolated E2B sandboxes with pluggable Claude and OpenAI runtimes, permission-scoped MCP tools, durable state, and skills/plugins.
- Developed topology-aware synthesis and scoped extraction for entity resolution, attribute filling, document linking, and cited, versioned writes across 30K+ entities and 2M+ structured attribute values.
- Built durable ingestion supporting 50K+ production documents across PDFs, Excel, and email, with classification, entity routing, versioning, and retry-safe recovery.
- Developed Langfuse evaluations, LLM-as-a-judge workflows, regression datasets, and Axiom monitoring for grounding and reliability; delivered covenant analysis, credit memos, financial spreading, and reporting workflows.

AgentSmyth | Staff AI Engineer

Jun 2024 - Oct 2025 | New York, NY

- Joined as employee #2 and led technical strategy for an AI-first fintech, helping scale the business to \$1M ARR and secure \$9.1M in funding.
- Architected a production multi-agent financial-intelligence platform spanning macro analysis, quantitative research, options, and sentiment using multiple model providers.
- Combined market data, earnings transcripts, Pinecone/LlamaIndex retrieval, and agentic reasoning across 100+ financial sources to generate fully cited research.
- Delivered portfolio insights generating 10K+ reports across 1,000+ tickers for 50+ clients, using AWS Lambda, SQS, and event-driven orchestration for SaaS and on-premises deployments.

S&P Global Market Intelligence | Data Scientist to Senior Data Scientist

Nov 2021 - Jun 2024 | New York, NY

- Built Python credit-risk models and an AWS scoring platform covering 30K+ unrated issuers, achieving 99% efficiency gains and \$1.2M in annual revenue impact.
- Developed Capital IQ Pro document intelligence with LLM summarization and topic modeling; the work identified \$6.8M in revenue potential.
- Engineered retrieval-augmented analytics APIs, transformer-based ESG disclosure analysis, and investment-banking automation including Public Information Book generation.

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Earlier experience

BMW Group | Data Scientist | Internship

Mar - Aug 2021 | Munich, Germany

Setai | Data Science Consultant | Contract

Aug 2020 - Feb 2021 | Bologna, Italy

Packages Group | Data Engineer

Jan - Nov 2019 | Lahore, Pakistan

Fatima Group | Software Engineer

Oct 2017 - Oct 2018 | Pakistan

Selected projects

TDF Offer Alerts | Independent automation

Cloudflare-based theatre-availability monitoring, persistent seen-history, Telegram alerts and a New York morning digest, with authentication-aware browser recovery.

Civics Coach | Voice AI application

Voice-led civics practice, study and progress flows, with English-first interviews and optional Urdu explanations. Public app; private source.

Service Booking Agent | Local demo

Conversational scheduling with durable threads, explicit approval, transactional appointments, ownership checks, and retry protection. SMS is simulated.

Document LLM Lab | Local research experiment

Apple Silicon LoRA fine-tuning experiments for structured lease-PDF extraction, with explicit output contracts, evaluation artifacts, and synthetic-data boundaries.

CitiGRC | Business website

A remodeling business website and inquiry workflow for Long Island and New York City.

Technical capabilities

AI systems & evaluation | Agent runtimes, MCP, Tool orchestration, RAG, Structured outputs, Langfuse, LLM-as-a-judge, Axiom

Machine learning & data | Credit-risk modeling, NLP, Entity resolution, Knowledge graphs, Document intelligence, Model validation

Engineering & infrastructure | Python, TypeScript, SQL, FastAPI, PostgreSQL, pgvector, Pinecone, AWS Lambda/SQS, E2B, Cloudflare, Docker, GitHub Actions

Education & honors

Zicklin School of Business, Baruch College, CUNY

Master of Business Administration | 2024 | GPA 4.0 / 4.0

Beta Gamma Sigma Honor Society; Eric and Lori Kirsch Scholarship, 2023-2024

University of Bologna

Master's in Artificial Intelligence | 2021 | 110 / 110 cum laude

Rector's Merit Award - highest GPA in school; UNIBO Action 2 scholarships, 2019-2021

University of Engineering and Technology, Lahore

Bachelor's in Electrical Engineering | 2017