

Ahsan Ishaq

AI Automation Engineer | n8n, LLM APIs, RAG, PostgreSQL

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SUMMARY

AI automation engineer with 8+ years in software. Spent over seven years building Android apps, then moved into AI automation in 2025. Builds AI systems in n8n and keeps them running in production, including an AI receptionist for clinics with RAG and calendar booking, and multi-tenant reply automation for cold-email agencies. Works across the full stack: Claude and OpenAI APIs, PostgreSQL with pgvector, and the Docker server everything runs on. Case studies with architecture diagrams are at ahsan.ahsomatic.com.

SKILLS

AI and LLMs: Claude API (Anthropic), OpenAI API (GPT-4o-mini), prompt engineering, AI agents, RAG, embeddings, pgvector hybrid search, reranking, grounded answers, Claude Code

Automation: n8n (self-hosted), webhooks, sub-workflows, scheduled jobs, error-handler workflows, multi-tenant design, REST APIs

Data: PostgreSQL 15, pgvector, PgBouncer, SQL, JSON, data pipelines

Infrastructure: Docker, Docker Compose, Linux (Ubuntu), DigitalOcean, Nginx Proxy Manager, Cloudflare, Tailscale, SSH

Integrations: WhatsApp Cloud API (Meta), Twilio, Google Calendar API, Slack, Resend, Firebase Cloud Messaging, Instantly, Calendly, Property Finder

Programming: JavaScript (Node.js), Python, SQL, Kotlin, Java

Android: Android SDK, Jetpack Compose, MVVM, Retrofit, Hilt, Firebase, OCR, speech-to-text, NFC

Practices: Git, Agile/Scrum, clean architecture, SOLID, code review, failure testing

EXPERIENCE

Founder and AI Automation Engineer, Ahsomatic

Remote | 2025 – Present

- Design and build AI automation products end to end on a self-hosted server, with 73 n8n workflows in total: CareLayer (AI receptionist for clinics, live), InboxLayer (email reply automation for cold-email agencies) and 60Second (WhatsApp lead qualification for real-estate agencies).
- Built CareLayer, an AI receptionist for dental and health clinics that works on the clinic's website and WhatsApp. Its main n8n workflow (55 nodes) sends each message to the Claude API, qualifies the lead and books the visit into Google Calendar. Staff get one alert per lead on Slack, email and their phones, and a 29-node REST API powers their mobile app.
- Prevented double bookings by holding each slot in PostgreSQL before creating the calendar event. Unused holds expire every 5 minutes, and Google Calendar sync runs behind a database lock with an automatic full resync when the sync token expires.
- Built a RAG knowledge base on pgvector with query rewriting, hybrid search, reranking only when there are enough results, and a grounding check that blocks answers when the evidence is weak. Ingestion skips unchanged documents and keeps old versions.
- Tested the booking flow with full multi-message conversations over three rounds and fixed 12 issues, including 3 silent data errors. Enforced the most important rules in code as well as in the prompt, so the bot can't promise slots, prices or insurance cover it doesn't know about.
- Built InboxLayer for cold-email agencies on Instantly: reply sorting that uses rules first and GPT-4o-mini only for unclear replies (46 nodes), hot-lead follow-up (49 nodes), domain health checks for MX, SPF, DKIM, DMARC and two spam blacklists (27 nodes), and unsubscribe sync (32 nodes). Each client gets its own API key.
- Run the whole stack on one DigitalOcean server with 2 vCPUs and 2 GB of RAM: 6 Docker containers in 3 Compose projects, PostgreSQL 15 with pgvector and PgBouncer, Nginx Proxy Manager, Cloudflare and Slack error alerts.

- Built an n8n and Python scanner that checks clinic websites in batches for chat tools, booking links and ad tracking, and used it to study 105 clinics.

Senior Android Developer, Magnatec Systems

Lahore, Pakistan | Jun 2021 – Jul 2025

- Designed and built SMACC, a cloud point-of-sale app for retailers in Saudi Arabia, with real-time inventory sync, secure payments and custom receipts.
- Integrated barcode scanners, NFC readers and receipt printers, and added encrypted accounts and automatic cloud backups with 99.9% uptime.
- Led feature delivery in agile teams and mentored developers on MVVM and Kotlin.

Android Developer, AsApp Studio, Ninesol Technologies and other studios

Pakistan / Remote | 2017 – 2021

- Shipped 10+ Android apps (Kotlin, Java, MVVM, Retrofit, Firebase) for chat, e-commerce, education and utilities. One of them, the text-to-speech app Narrator's Voice, passed 50,000 downloads with a 4.5 rating.
- Built OCR, speech-to-text, custom keyboard and accessibility automation features, and made data processing 30% more efficient by improving API integration.
- Kept apps within Google Play policy, added AdMob ads, and lowered crash rates through performance work and CI/CD.

PROJECTS

- **CareLayer (live):** AI receptionist for clinics on website chat and WhatsApp. n8n, Claude API, PostgreSQL, pgvector, Google Calendar API. Case study: ahsan.ahsomatic.com/#carelayer
- **InboxLayer:** reply sorting and lead follow-up for cold-email agencies. n8n, GPT-4o-mini, PostgreSQL, Instantly API. Case study: ahsan.ahsomatic.com/#inboxlayer
- **Narrator's Voice (Android):** text-to-speech app with multilingual voices, 50,000+ downloads, 4.5 rating. Kotlin, speech APIs.

CERTIFICATIONS

- n8n Course Level 2, n8n | Apr 2026 | [Verify credential](#)
- AI Agents for Beginners, Simplilearn SkillUp | Mar 2026 | [Verify credential](#)

EDUCATION

BS Software Engineering, University of Sargodha, Pakistan | 2012 – 2016

LANGUAGES

English (professional), Urdu (native)