Alex Lewis
AI Architect

hello@ajrlewis.com +44 7535 791970 ajrlewis.com github.com/ajrlewis linkedin.com/in/ajrlewis

LONDON, UK · AVAILABLE WORLDWIDE

Alex Lewis.

My background spans astrophysics, production software engineering, and applied AI.

SELECTED EXPERIENCE

AI Solutions Architect · Gresham House · Contract

APR 2026–PRESENT

- Built an enterprise MCP platform giving ChatGPT and Claude governed access to company knowledge and reusable capabilities across approximately 400 staff.
- Designed LLM-oriented content, versioned skills and Snowflake retrieval guidance, deployed on Azure with Entra ID, Docker and automated pipelines.

Senior Software Engineer · Digital Speed · Contract

OCT 2025–MAR 2026

- Built an internal Slack AI assistant using TypeScript, Next.js, MCP and retrieval, making company knowledge easier to find and reducing time spent searching across internal sources.
- Integrated GitHub issue tracking with knowledge ingestion and reusable skills for Claude and Cursor, reducing time spent searching for context before starting or resuming work.
- Developed Java libraries for multi-language SDK generation, including ISO 20022 validation and secure XML preprocessing.

AI Solutions Architect · Downing LLP · Contract

AUG–NOV 2025

- Built a model-agnostic LangGraph platform on Azure for triaging and routing requests through Microsoft Teams, with switching across Anthropic, Google and OpenAI.
- Implemented human review, thread-aware PostgreSQL state using Managed Identity, and LangSmith observability.
- Established a gated Azure DevOps pipeline supporting progression from research and development through user acceptance testing.

Technical Founder · W4lkies Ltd

FEB–JUL 2025

- Built a full-stack operations platform using Next.js, FastAPI, PostgreSQL and Docker that streamlined booking management and invoice generation, reducing routine administration.
- Added authentication, role-based access, seed data and backup tooling for reliable day-to-day operation.

Lead AI Architect · Hyperhumans OÜ

MAR 2024–JAN 2025

- Built the FastAPI backend for a lead-intelligence product with multi-stage discovery, enrichment and scoring pipelines.
- Integrated Bing Search, OpenAI and Hunter.io, with validated schemas and SQLAlchemy data access.
- Designed commercial API access with role-based permissions and credit metering.

Head of Optimisation · Itim Ltd

MAR 2019–FEB 2024

- Built FastAPI and SQL pipelines producing more than one million daily SKU/store forecasts, using signal-based triage to reserve model training for higher-value series.
- Retrained Holt-Winters models on rolling windows and stored 98-day forecasts for downstream systems.
- Led a distributed engineering team, establishing technical standards, mentoring and delivery practices.

EDUCATION

PhD Astrophysics

UNIVERSITY OF EDINBURGH · 2014–2018

Studied ultra-red galaxies and candidate proto-clusters using submillimetre observations, large-scale data reduction, simulations and statistical analysis.

First-author research in *The Astrophysical Journal*; part of the ERC-funded COSMICISM programme.

CORE EXPERTISE

AI systems

LLM applications, agents, MCP, RAG, evals, orchestration and human-in-the-loop workflows.

Engineering

Python, TypeScript, FastAPI, Next.js, PostgreSQL, pgvector and API design.

Platform

Azure, Docker, CI/CD, Entra ID, Snowflake and production observability.