ADRIAN SACRISTAN

TECH LEAD | AI Engineer

Gen AI | ML | Backend | DevOps | Data | Front | Mobile | UI/UX
+ 10 years of experience

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Experience

MHRA
Tech Lead
Jun 26 - Now

- Led the technical **direction** and delivery of the **Strategic Data Integration Capability programme at the MHRA**, shaping architecture, engineering standards, and delivery practices across data, platform, and application workstreams in a highly regulated **government and life-sciences** environment.
- **Designed an end-to-end software delivery model** spanning requirements, technical design, development, testing, deployment, and operational support, improving collaboration and traceability across Jira, Confluence, GitHub, and Microsoft cloud tooling.
- **Architected integration** approaches between **Microsoft Fabric, Azure services, and legacy on-premise platforms such as Documentum**, addressing connectivity constraints, cross-programme dependencies, and the operationalisation of secure, scalable data products built on **data modelling**, **Databricks** and **dbt** patterns with **data governance**, quality and lineage controls.
- **Collaborated with C-level internal stakeholders**, engineering teams, and external delivery partners to improve technical governance, delivery visibility, and team efficiency, running **solution-design** sessions with partners and introducing **AI-assisted engineering workflows** with **Claude Code, Cursor and GitHub Copilot** across the software development lifecycle.
- Defined **AI governance and assurance** practices and prototyped **Claude (Anthropic API)** and **MCP**-based agent **proofs of concept**, backed by **LLM evaluation** harnesses.

Coinbase
AI Engineer
Dec 25 - May 26

- Led the design and delivery of agentic AI systems **for internal and customer-facing enterprise workflows, orchestrating multi-agent pipelines using LangChain**, **LangGraph**, **PydanticAI** and **MCP** tool-calling architectures **to automate decision-making, analysis, and execution at scale.**
- **Built and deployed** LLM-powered services **(RAG, autonomous agents, background workers)** using **Python**, **FastAPI**, **Go**, **OpenAI**-compatible models and the **Anthropic (Claude) API**, vector databases, and event-driven architectures, integrating seamlessly with existing Coinbase platforms in a **financial-services** environment.
- **Architected** production-grade **AI infrastructure on cloud environments** with strong guarantees around security, observability, and reliability**, applying best practices in API security (JWT, OAuth), LLM evals, model monitoring, latency optimisation, and agent failure recovery.**
- Collaborated closely with product, compliance, and security teams to ensure AI systems met regulatory, **AI governance** and risk standards, while **mentoring engineers** on agent design patterns, prompt orchestration, and scalable GenAI architectures.
- Accelerated delivery with **AI coding tools (Claude Code, Cursor, GitHub Copilot)** for prototyping, tests and code review.

British Airways
Technical Lead
Mar 25 - Nov 25

- **Led a cross-functional team of 7 engineers and 6 data scientists**, driving the development of AI-powered systems aligned with business strategy. Regularly engaged with stakeholders across technical and business units and presented technical findings and roadmap updates directly to the COO's team in executive-level briefings.
- Led **GenAI** initiatives using **LLMs**, **LangChain**, and **RAG** pipelines to enhance real-time flight planning and decision-making systems.
- Designed and deployed serverless and microservice architectures using **AWS** Lambda, CDK, SQS, and model serving via **FastAPI** and **React** with **TypeScript**, optimising model **performance and latency** on **GPU** infrastructure (**CUDA**).
- Built **data engineering** pipelines with **Dagster**, **Databricks** and **dbt**, applying **data modelling**, **data governance** and quality controls to flight-operations data.
- Integrated monitoring and auditing frameworks (**Grafana**, **CloudWatch**) to ensure compliance with GDPR and CCPA, collaborating with legal and compliance teams to align AI systems with regulatory frameworks.
- Applied differential privacy, federated learning, and adversarial testing techniques to safeguard sensitive data and evaluate model robustness.
- Mentored engineers in **prompt engineering**, secure API development (**JWT**, **OAuth**), and **multi-agent orchestration**.

Monolithai
Technical Lead
Jun 24 - Dec 24

- **Fine-tuned LLMs** with **Hugging Face** and **LoRA/QLoRA**, training and deploying them on **GPU** (**CUDA**) and **Kubernetes** (EKS) infrastructure with **CI/CD** via GitHub Actions.
- Integrated **vector databases** (**FAISS**, **Weaviate**, **Pinecone**) to power **RAG**-based search applications.
- Built **full-stack** apps in **TypeScript** (**Nest.js**, **Node.js**, **React**, **Tailwind** CSS) on **PostgreSQL** and **SQL**.
- Built secure **FastAPI** and **OAuth** APIs and low-latency model serving endpoints for real-time inference on **Linux**.
- Rapidly prototyped **PoCs and MVPs** for the **B2B SaaS** platform in a fast-paced startup environment, leading engineering with **XP methodologies** (**TDD**, pair programming) and automated model-evaluation tests.
- Delivered training sessions on **GenAI** tools such as **LangGraph** and **OpenAI API**.

Climate Policy Radar
Technical Lead
Jan 24 - Apr 24

- Refactored the **database management layer, ORM and migrations** into a standalone library now **used by several backend services**.
- Maintained and extended backend and **full-stack** services (**Python, FastAPI, PostgreSQL, React, TypeScript**), shipping new features in a small, fast-moving team with **Docker** and GitHub workflows.
- Improved the user experience following **UI/UX research**, turning findings into quick prototypes and production changes.
- Deployed **LLM-based NLP** features for climate policy analysis with **LangChain** and the **Azure OpenAI SDK**, adding document indexing through **LlamaIndex**.
- Designed a **serverless architecture on AWS** (Lambda, Boto3, CDK) with RESTful integrations to external services.
- Built **privacy-first** solutions for sensitive legal data (**federated learning, differential privacy**), monitored production models with **Grafana and CloudWatch**, ran **adversarial testing** and explained AI risks to non-technical stakeholders.

Erlang Solutions
Technical Lead
Apr 23 - Dec 23

- Delivered the **complete backend and infrastructure** for an internal **OCR** system that extracts information from and labels thousands of invoices per month.
- **Refactored a monolith into autonomous services** with a common **async task broker** (**Celery, RabbitMQ, Redis**) and external integrations.
- Built **computer-vision** pipelines for invoice automation with **OpenCV, PIL and YOLO** alongside the OCR stage.
- Served models through **FastAPI** endpoints with **JWT** authentication and **PostgreSQL** access (psycopg2, SQLAlchemy).
- Built reliable development and production environments on **Kubernetes** (**GCP**, Docker, GitLab **CI/CD**, **Helm, ArgoCD** GitOps, **Linux**) with **Sentry** observability.
- Worked in a **client-facing consultancy** role, supporting **pre-sales** and **solution design** conversations, and mentored developers in GenAI quality assurance and secure deployment.

Senniors
Technical Lead
Jun 22 - Apr 23

- **Designed and partly executed the digitalisation plan** that delivers the company's services through **two mobile apps and one web app**.
- **Recruited, managed and mentored an engineering team of eight** (UI/UX, front end, back end and a data engineer), working in agile sprints on **Jira and Notion**.
- **Designed and built a mobile app for active ageing** with Google, Fitbit and Zurich group, taking it from prototype to **MVP** in an ambiguous, **startup** environment.
- Delivered Android and iOS apps in **React Native** and a **React** web app on a **Python (FastAPI, Django)** backend deployed on **GCP** with **Kubernetes**.
- Built the backend **infrastructure and architecture** in Python with **FastAPI** together with the Head of Backend, and worked with design in **Figma** to turn UI/UX concepts into shipped features.

Playbrush
Senior Software Engineer
Jun 21 - Jun 22

- **Led a complete architecture refactor and infrastructure upgrade** of several backend **microservices**, improving reliability and **performance**.
- Developed the **mobile game backend** behind the gamified toothbrushing app, serving **REST and real-time (WebSocket) APIs** to the mobile clients (**Python, FastAPI, Flask, MongoDB**).
- Worked with data from the **connected toothbrush (IoT)** and in-app activity, building the pipelines that turn it into usable **product analytics** (**Pandas, NumPy, Jupyter**).
- Conceptualised, analysed and built **data reports** and their **ETL pipelines**, integrating **Stripe, Shopify** and other **e-commerce** sources for **SQL** analysis and **Power BI** dashboards.
- Delivered, together with the project manager and over more than a year of close collaboration, **one of the most successful features** of the Playbrush app.
- Collaborated with mobile, product and data colleagues in an **agile** team, owning backend delivery and **API design** for new features.

Aplazame
Software Engineer
Mar 20 - May 21

- Maintained and extended the **admin tools** used to manage **thousands of loan customers** on a **buy-now-pay-later** (consumer lending) **fintech** platform (**Python, Django, PostgreSQL**).
- Maintained and extended the **Python** backend, applying **design patterns** to **REST APIs** and **SQL** data access.
- Worked on **payments and lending workflows** (customer accounts, instalment plans and merchant integrations) in a **regulated financial-services** environment.
- Supported **risk and operations** teams with **data analysis** of customer and loan data (**Pandas, SQL**).
- Shipped **containerised** services with **Docker** on **AWS** and kept back-office features reliable in production.
- Worked in an **agile (Scrum)** product team alongside product and operations colleagues, delivering back-office features incrementally.

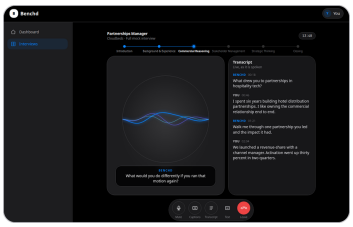
Banco Santander
Software Engineer
Dec 18 - Mar 20

- **Conceived, designed and built an internal data aggregation compliance tool** for **KYC, AML and CTF** in a regulated **banking** environment.
- Delivered the tool end to end as a **full-stack** application (**Python, Django, React, PostgreSQL**) deployed on **AWS**.
- Produced **big data** reports and **ETL** analysis of a massive volume of commercial invoices with **Hadoop, Hive, Spark and Pandas**.
- Applied **data warehousing and data modelling** to consolidate data from several sources into a single view for compliance analysts (**PostgreSQL, Cassandra, SQL**).
- Designed the tool around **data quality, governance and lineage** for regulated data, so compliance teams could trace and trust the results.
- Worked with compliance stakeholders to turn regulatory requirements into reliable data products.

BBVA
Software Engineer
Mar 18 - Dec 18

- Created the **data pipeline** that generates **reports and alerts** for **financial derivatives** instruments such as dividend swaps and exotic market products.
- Built the pipeline and its services with **Python, Flask, Pandas and MySQL**, with **JavaScript** for the web layer.
- Delivered the results through **Excel and Power BI** reports used for derivatives analysis.
- Designed **alerting** logic that flagged relevant changes in instruments automatically instead of relying on manual checks.
- Worked in the **capital markets** domain, turning analysts' needs into automated, reliable reporting.

Recent projects

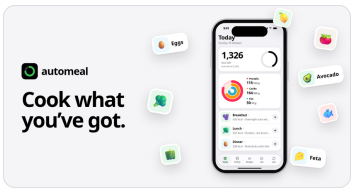


Benchd

Founder & Tech Lead · Live, private beta

AI voice mock-interview platform for candidates applying to commercial roles in hospitality tech. An AI interviewer adapts to role and seniority, then a scored report gives question-by-question feedback against a six-competency rubric.

Designed and built end to end: product, architecture, **real-time voice agent** (ElevenLabs Agents with an OpenAI model), scoring and reporting. **Next.js, React, TypeScript** monorepo on Vercel, **FastAPI** on Render, **Supabase Postgres**, GitHub CI.

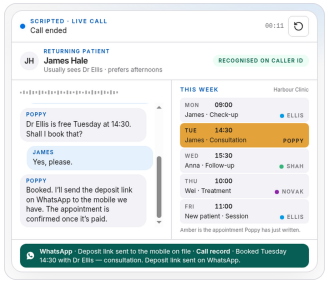


AutoMeal

Founder & Tech Lead · MVP in development

AI-powered meal planning and nutrition web app that plans meals around what you already have in your pantry and generates the shopping list.

Product, architecture and development: **Next.js** landing on Vercel, waitlist API on Render and an **OpenAI**-based AI backend. Public landing page and waitlist launched in Oct 2026.



Poppy

Founder & Tech Lead · Pre-launch

Multi-agent AI front desk for UK private clinics: answers patient calls and messages 24/7, handles enquiries and bookings and hands off to staff when needed, so clinics stop losing patients to missed calls.

Product, architecture and **AI agent design** (reception, booking and staff handoff) plus a **Vite + TypeScript** landing on Vercel with an interactive patient-conversation demo. Demo, proposal and roadmap presented to a prospective private clinic.



Fastapi rocket boilerplate

Open Source

After FastAPI Rocket Boilerplate got viral **pre AI** as an **open-source** project, it is being used by the community to build an API based in Python with its most modern technologies.

Infrastructure, ORM, authentication and admin dashboard served easy, fast, async and reliable for solving the 99% common problems in backend.

Reviews



Yifan Xu
Tech Lead
Coinbase

I had the pleasure of working with Adrián at Coinbase, where he consistently stood out as a thoughtful, reliable, and highly capable engineer. He brings strong technical judgment, clear communication, and a very collaborative mindset to complex problems.

What I appreciated most was his ability to combine ownership with humility—he was always willing to dive deep, help others, and move work forward in a practical way. I would happily recommend Adrián to any team looking for someone who is both technically strong and great to work with.



Txema Bermudez
Backend Engineer
British Airways

I had the pleasure of working under Adrián's leadership at British Airways, where he has been an exceptional Technical Lead. Adrián not only brings strong technical expertise across the stack — from React and FastAPI to complex data engineering workflows with Dagster — but also demonstrates outstanding leadership and mentorship skills.

He managed a team of engineers working closely with a data science group, navigating the complexity of cross-functional collaboration with clarity and empathy. One of Adrián's most remarkable strengths is his ability to listen deeply and provide thoughtful, strategic advice. Whether it was about product direction, technical design, or team dynamics, his guidance was always grounded, constructive, and forward-thinking. […]



Marina Hernandez
Head of Backend
Senniors

It was a great experience to work with Adrian. A born leader, with unmatched problem-solving skills and exceptional charisma.
Together we have built infrastructure and architecture in Python using FastAPI.
It has been a pleasure to learn from him not only technical knowledge, but also functional, management and communication skills.

More reviews in

Education

Technological change and innovation
Postgraduate
BBVA
2018

- Captain of a multidisciplinary work team (15 team members)
- 1st / Class I – Top of the class (9.3/10) –70 students

Business administration and management
Grade
URJC
2014-2018

- Strategy, Markets and Finance
- 2:1

Telecommunication systems
Engineering
URJC
2013-2018

- Mathematics, Electronics, Software and Artificial Intelligence
- 2:1

Software Engineering stack

Languages	Python I TypeScript I SQL I Go I JavaScript I Java I Kotlin I Scala I Rust I C++ I C# I Swift I Dart / Flutter I Ruby / Rails
API / Backend	FastAPI I Django I Flask I Node.js I Nest.js I LangChain I LangGraph I LlamaIndex I OpenAI API I Azure OpenAI SDK I Google AI SDK I Requests I JWT I OAuth I REST / API Design I GraphQL I Microservices I Full-stack Development I Spring I Java / .NET I Celery I WebSockets
DevOps / MLOps	AWS I GCP I Azure I Docker I Kubernetes (EKS/ECS) I Terraform I Pulumi I CDK I GitHub Actions I Datadog I Grafana I CloudWatch I Boto3 I Sentry I Kibana I MLflow I Linux I Helm I ArgoCD / GitOps I Performance / Latency Optimisation I Cost Optimisation / FinOps I Security / IAM / DevSecOps I Microsoft 365 / Power Platform I Render I GitLab CI
Databases / Data Infrastructure	PostgreSQL I MySQL I SQLite I MongoDB I Elasticsearch I Cassandra I Redis I Snowflake I BigQuery I FAISS I Pinecone I Weaviate I SQLAlchemy I psycopg2 I SQS I Databricks / Lakehouse / Delta Lake I dbt I Data Modelling / Warehousing I Data Governance / Quality / Lineage I Kafka / Streaming I BI (Power BI / Tableau / Looker) I Supabase I RabbitMQ

Big data / Data Processing	Hadoop I Hive I Spark I Pandas I NumPy I Scikit-learn I Transformers (Hugging Face) I PyTorch I TensorFlow I JAX I Differential Privacy I Federated Learning
Computer Vision	OpenCV I PIL / Pillow I YOLO I OCR
Frontend / UI	React I Next.js I Redux I Recoil I Tailwind CSS I Vercel I Turborepo
Mobile	Expo I React native I Firebase
Others	RAG (Retrieval-Augmented Generation) I LoRA / QLoRA I Model Monitoring I Prompt Engineering I Model Evaluation I Secure Multi-Party Computation I Apigee I Markdown I HTML I Rapid Prototyping / PoC / MVP I Open-source Contribution I Agile / Scrum / XP I Product Engineering

AI Engineering stack

Agentic AI / LLM Orchestration	Agentic AI I Multi-Agent Systems I Autonomous Agents I Tool Calling I Function Calling I Agent Planning I Agent Memory I Agent State Management I Workflow Orchestration I Structured Outputs I Human-in-the-Loop I Background Agents I Agent Failure Recovery I MCP (Model Context Protocol) I CrewAI / AutoGen I Claude Agent SDK
RAG / Knowledge Systems	RAG (Retrieval-Augmented Generation) I Embeddings I Semantic Search I Vector Search I Document Retrieval I Chunking I Metadata Filtering I Hybrid Search I Retrieval Evaluation I Knowledge Bases I Grounding I Context Management I FAISS I Pinecone I Weaviate I Elasticsearch I Knowledge Graphs / Graph DBs I NLP
LLM Frameworks / Model APIs	LangChain I LangGraph I PydanticAI I LlamaIndex I OpenAI API I OpenAI Realtime API I Azure OpenAI SDK I Azure AI Foundry I Google AI SDK I Groq API I Hugging Face Transformers I Anthropic API / Claude API I AWS Bedrock / SageMaker / AgentCore I Google Vertex AI / Gemini
AI-assisted Engineering	Claude Code I Cursor I GitHub Copilot I AI Pair Programming I Prompt-driven Development
AI Evaluation / Safety / Observability	LLM Evaluation I Agent Evaluation I Model Evaluation I Prompt Evaluation I Retrieval Evaluation I LLM-as-a-Judge I Benchmarking I Model Monitoring I AI Observability I Prompt Tracing I Guardrails I Hallucination Mitigation I Failure Recovery I Responsible AI I AI Governance / Assurance / Compliance
Machine Learning / Deep Learning	Scikit-learn I PyTorch I TensorFlow I JAX I Transformers (Hugging Face) I Fine-Tuning I LoRA / QLoRA I Differential Privacy I Federated Learning I Pandas I NumPy I Reinforcement Learning I GPU / CUDA / Distributed Training I Ray / RLlib
Voice AI / Computer Vision / Multimodal	Voice AI I Speech-to-Text I Text-to-Speech I Real-Time Audio Pipelines I Deepgram I ElevenLabs I OpenAI Realtime API I Vision-Language Models I OpenCV I PIL / Pillow I YOLO I OCR

Domains & Ways of working

Domains	Enterprise Software / SaaS / B2B I Financial Services / Banking / Fintech I Regulated Environments / Compliance I Healthcare / Pharma / Life Sciences I Government / Public Sector I Retail / CPG / E-commerce / Logistics I AI / ML Startups & Frontier Labs I Education / EdTech I Energy / Utilities / Infrastructure I iGaming / Gaming
Leadership & Delivery	Technical Strategy / AI Transformation I Stakeholder Management I Executive / C-level Presentation I Cross-functional Collaboration I Hiring / Team Building I Mentoring / Coaching I Project / Programme Delivery I Agile / Scrum / XP I Product Thinking I Pre-sales / Solution Design I Client-facing / Technical Consulting
Ways of working	Ownership / High Agency I Ambiguity / Fast-paced / Startup Mindset I Rapid Prototyping I Documentation / Knowledge Sharing I Curiosity / Continuous Learning I Written & Verbal Communication