

Antoine Pinto

Freelance - Lead Al Engineer | Data Scientist

Data Scientist and AI Engineer specializing in the design, development, and deployment of enterprise-grade Generative AI solutions. Experienced in building custom RAG architectures, leading Gen AI projects from needs assessment to delivery, and serving as the technical referent for development teams. Portfolio of multiple self-developed AI applications and published Python packages.

Personal information

Location: France

Email: antoine.pinto1@outlook.fr

Tel: 06.95.39.74.58

- Portfolio: https://antoine-pinto.ai-apps.cloud

- LinkedIn: https://www.linkedin.com/in/pinto-antoine

- **GitHub**: https://github.com/AntoinePinto

Languages

French: Native languageEnglish: Professional

Experiences



Lead Al Engineer & Backend developer - European Digital Group

Jan. 2024 – Jun. 2025 (1 year et 6 months) - CDI

Responsible for back-end development (FastAPI) of the group's generative AI portal and its business units (1000+users).

Technical administrator for developer access (GCP IAM access, MongoDB whitelisting, SSO permissions).

Development of AI applications (Streamlit & FastAPI) tailored to the group's needs:

- CV Match: find the ideal candidate among the group's talents based on a job description or a prompt
- Job Qualifier: automatically generate a client email and CRM note following a job qualification interview with a client
- Specialized Chatbots: query a document database through a chatbot equipped with advanced AI techniques (agents, RAG, Chain of Thought, ReAct, etc.)
- Admin Panel: manage portal access and permissions through a panel dedicated to each business unit's managers



Lead Al Engineer & Backend developer - Groupe Clarins

Oct. 2024 - Apr. 2025 (7 months) - Service provider

Responsible for back-end development of the company's internal generative AI portal for several thousand users:

- Implementation of a flexible, robust, and modular architecture in an Agile development environment.
- Support and supervision of the development team.
- Translation of business requirements into features and validation of technical feasibility prior to implementation.



Senior Data Scientist & Al Engineer - VINCI Airports

Apr. 2022 - Dec. 2024 (2 years et 9 months) - Service provider

Development and maintenance of generative AI applications to meet various needs (Traffic, Finance, HR) as part of the deployment of the company's internal AI portal (several thousand users):

- CV Match: find candidates matching a requirement in a CV database.
- Knowledge Base: interact with a document database.
- Performance Report: generate an activity report (traffic, finances, etc.) using generative AI.
- Admin Panel: manage portal users and their access.

Implementation of the group's first air traffic forecasting model. Development of models for different time horizons.



Trainer Python & SQL Advanced - Paris Dauphine University

Jan. 2024 – Jun. 2024 (6 months) – CDD

Delivered an 18-hour course on "Python & SQL – Intermediate Level" for the Master's in Economics and Finance program.



Senior Data Scientist & Al Engineer - Equancy | European Digital Group

Apr. 2022 - Jun. 2025 (3 years and 3 months) - CDI

Development of applications for multiple companies and industries: Generative AI portals (3 client portals with 1000+ users); performance/document analysis tools, internal chatbots, CV matching systems, knowledge bases, etc. Designed flexible architectures adaptable to diverse environments.

Generative AI technical lead for development teams (50+ developers): Provided technical guidance, shared best practices, delivered training sessions, and coordinated Gen AI projects (needs analysis, task allocation, project follow-up).

Management / Recruitment: Led a 3-person team. Conducted technical evaluations and recruitment for the Data Science division.



Machine Learning Scientist – Institut de Mathématiques de Marseille

Apr. 2021 – Sep. 2021 (6 months) - Internship

Co-author of a research paper on the development of a clustering method tailored for Big Data, based on the MapReduce framework: MapReduce Clustering for Big Data | IEEE Conference Publication - B. Ghattas; A. Pinto; S. Diao

Technical skills

- **Python:** Dedicated a minimum of 4 hours per day to Python development. Developed 10+ backend applications using Python / FastAPI. Created several Python libraries (<u>custom-decision-trees</u>, <u>string-pair-finder</u>, <u>easyenvi</u>, etc.)
- **SQL & Database**: Proficient in SQL with PostgreSQL, MySQL, and SQLite. In NoSQL using MongoDB. Experienced with Big Query and Google Cloud Storage (GCP).
- **Generative AI**: Served as Generative AI referent in a company of 50+ developers. Implemented RAG (Retrieval-Augmented Generation) architectures and advanced techniques (Chain of Thought, Function Calling, ReAct).
- **Machine Learning**: Developed the first traffic forecast algorithm for a major airport operator. Created <u>Custom</u>

 <u>Decision Tress</u> (ML Library), published <u>MapReduce Clustering For Big Data</u> (Research paper).
- **Git**: Applied Git systematically across all development projects. Collaborated in teams using branches, merge requests, CI/CD, submodules. Founded and administered the GitLab Gen AI group for a company with over 50 developers.
- Google Cloud Platform: Proficient in 15+ GCP services used via interface or API: Cloud Run, Cloud Scheduler, Big
 Query, Cloud SQL, Cloud IAM, Cloud Storage, Cloud Tasks, Vertex AI, Artifact Registry, Google Auth, Cloud Logging.

- Web Scraping: scraped 10+ websites (scheduling, storage, proxy usage).
- Streamlit: Developed 10+ Streamlit applications example: Docu Talk (Streamlit version)
- Frontend: 4 React application developed with Vibe Coding example Docu Talk (React version)
- Other skills: R language; VBA; Pyspark; Excel; PowerPoint; Word; VS Code; Cursor; Notion; Trello; Azure (Azure OpenAI, Azure Blob Storage, Azure Entra ID); Docker

Project Portfolio

Generative AI Application Development:

Developed multiple Generative AI applications tailored to different professions (HR, Analysts, etc.) and sectors.

- Integrated features enhancing ergonomics and user experience (cost estimation, multiprocessing, etc.).
- CV Match; Knowledge Base; Performance Report; Document Translator; Specialized Chat Bots

Technologies: Python, Streamlit, PostgreSQL, Google Cloud Platform, Azure, OpenAI, Gemini, Cloud Run, Git

Pepit'Auto:

Application for easily searching for used cars on the French car market: https://pepit-auto.ai-apps.cloud.

- Implemented scheduled scraping to extract relevant information from ads.
- Designed a tabular view with formatting to enable effective comparison of listings.

Technologies: Python, FastAPI, React, Google Cloud, Scraping

Docu Talk

Al application that allows to create personalized Chat Bots from PDF documents in seconds: https://docutalk.ai-apps.cloud

- Implemented AI-powered features for automatic creation of chatbot titles, descriptions, and logos.
- Enabled source tracking to access exact document locations for AI responses.

Technologies: Python, FastAPI, React, Streamlit, Gemini, Google Cloud, AWS SES

Other projects

- **Air traffic forecasting:** Designed and implemented of the first air traffic forecasting algorithm for a major international airport operator representing a flow of 5.5% of world traffic.
- **Custom Decision Trees**: Python library that enables building Decision Trees and Random Forests with custom splitting criteria: https://github.com/AntoinePinto/custom-decision-trees
- **Trading Bot**: Implementation of an algorithm that automatically buys and sells financial assets based on the predictions of an ML model.
- **Soccer betting algorithm**: Design of algorithms to optimize sports betting decisions, based on the expected gain calculated via the training of Machine Learning models.
- **MapReduce Clustering for Big Data**: Co-authoring and development of a clustering method suitable for large data sets, based on the MapReduce method: <u>MapReduce Clustering for Big Data | IEEE Conference Publication</u>

Detailed resume