

Letter of Reference (intern)

The projects consisted of two main applications.

Survey Builder: LangGraph app to generate market surveys from minimal inputs (title, objectives, product info), enriched by external research nodes, with survey plan/questions creation, JSON to Excel conversion, and design-choice documentation.

Main challenges included the complexity of capturing the key information through complex questions, while respecting consulting best practices and company confidentiality.

Private-Banking Portfolio Analyzer: LangGraph multi-graphs framework for client/portfolio analysis; improved handling of numeric data and creation of tariffs reports.

Learning about private banking concepts, handling figures with the LLM and avoiding hallucination represented a big part of the project, which evolved in a good direction. Additional work is needed to inculcate relationship management concepts to the model.

Benoît Boidin was responsible for the following tasks:

- managing projects using Git version control, merging branches and migrating repositories from GitHub to GitLab:
- implementing tests (pytest), linting (flake8, black, isort, autoflake) and pre-commit hooks, ensuring professional code quality and non-regression
- developing Survey Builder functions (external research node, survey plan comparison, structured exports) and producing demo material;
- developing Portfolio Analyzer logic, auditing numeric outputs, and evaluating results against a test corpus;
- challenging architecture and current stack to improve code quality/features.

In addition, Mr. Boidin participated in and developed several secondary projects.

RAG Chatbot: Metadata-aware retrieval (URL, doc name, IDs), integration of metadata into prompts, experiments with file-locating agent.

RFQ Extractor: Prototype using LangExtract; dataset creation from RFQ files.

Voice Agent: Prototype using OpenAl Realtime API; LangGraph role-play agent as M&A negotiation counterpart, JSON transcript logging, critique nodes with spoken feedback.

Geneva, September 16th 2025