

IT Internship

Integration of Results from Artificial Intelligence Tools

Project Objective

The initial objective of the placement project is to carry out a Proof of Concept (POC) for the integration of AI results into the Telemis PACS. This integration must comply with the specifications defined in the IHE profile "AIR" (AI Results).

The aim is to identify the opportunities and impacts of this integration compared to what already exists in the Telemis software. In a second phase, once the AI results are integrated, the objective will be to enable the user to validate or invalidate the measurements via the IHE profile "AIR-A" (AI Result Assessment for Imaging).

Context

The Telemis PACS allows for the storage and distribution of medical imaging within a hospital institution. It also includes diagnostic tools enabling the radiologist to perform their analysis and ultimately write their clinical report. These tools can be complemented or replaced by specialised software based on Artificial Intelligence (AI). The refined integration of these results is therefore a key objective for a modern imaging solution.

Internship Objectives (*adapted depending on duration and skill level*)

- Analysis of the specifications of the IHE AIR and AIR-A profiles.
- Development of a demonstrator allowing the ingestion of results from AI-based tools (AIR profile).
- Integration into the Telemis applications, establishing links with Telemis' internal objects / database.
- Development of a demonstrator allowing the validation of AI results within the Telemis applications, saving the results, and integration into the clinical report.

Skills Involved

- Java
- DICOM (not essential)

What the intern will gain from this experience

- Discovery of the use of Artificial Intelligence within a medical imaging context.
- Knowledge of standardised protocols for information exchange in radiology.
- An understanding of the diagnostic processes in radiology.
- Useful and reusable experience in Java development.
- The opportunity to contribute to a project genuinely used in production.

Profile

- Student in Computer Science, Telecommunications, or Software Development.
- Inquisitive, structured, and motivated by tangible technical challenges.
- Proficient in Java or keen to rapidly improve their skills.