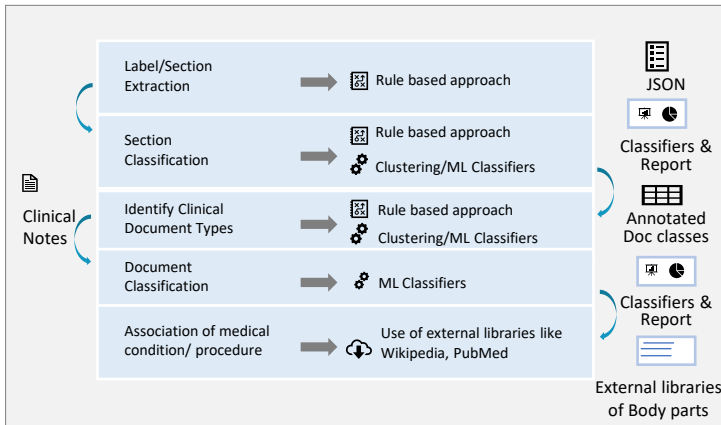


Case Study: Radiologist assisted AI Tool

Client Requirements

CitiusTech is helping a leading provider of artificial intelligence, innovative medical imaging, and interoperability solutions provider to build data assets, NLP based algorithms to achieve Contextual Summarization of clinical notes.

Client has AI tool which extracts patient information from EHR and provides patient summary to radiologists while assessing patient diagnostic images. Client wanted to make the system more robust by extracting information from natural language text



Solution Schematic

CitiusTech Services:

- CitiusTech developed an NLP-based solution for contextual summarization of clinical documents to enable 360 view of Patient's medical record
- Solution Input: Clinical Notes, Medically relevant public corpora(Wikipedia, PubMed)
- Analyzed unstructured clinical information to identify additional insights for accurate diagnosis
- Header and footer detection and classification for clinical notes using custom algorithms and features
- Classification models to classify each page of input pdf documents into well-defined labels for document type (Non-clinical, Encounter- start - intermediate - end)
- Rapid prototyping to evaluate different methodologies for classification and summarization

Value Delivered:

- F1 score ~80-95% for different classes
- 2K Gold standard clinical documents with annotation