

Presentación del Grupo de Investigación: MIDAS

Prof. Ernestina Menasalvas Ruiz

Infoday sobre tecnologías del lenguaje en Barcelona

Barcelona 2 dic 2019



POLITÉCNICA

Grupo MIDAS

- Structure

- 11 professors
- 3 predoctoral, 2 postdoctoral
- 4 CS



- Research Lines

- Data Analytics
- Knowledge structuring and representation
- Natural language Processing
- Image analysis
- Disease Networks. Drug repositioning and disease understanding

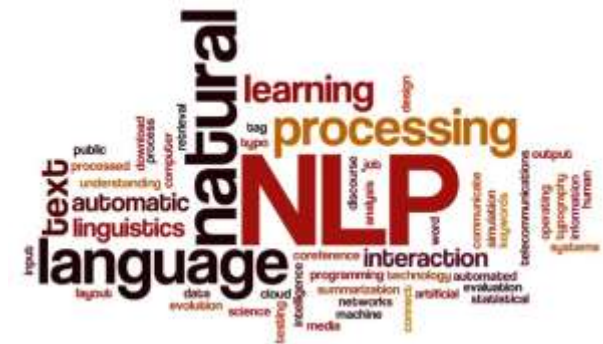
Our expertise

What we do now:

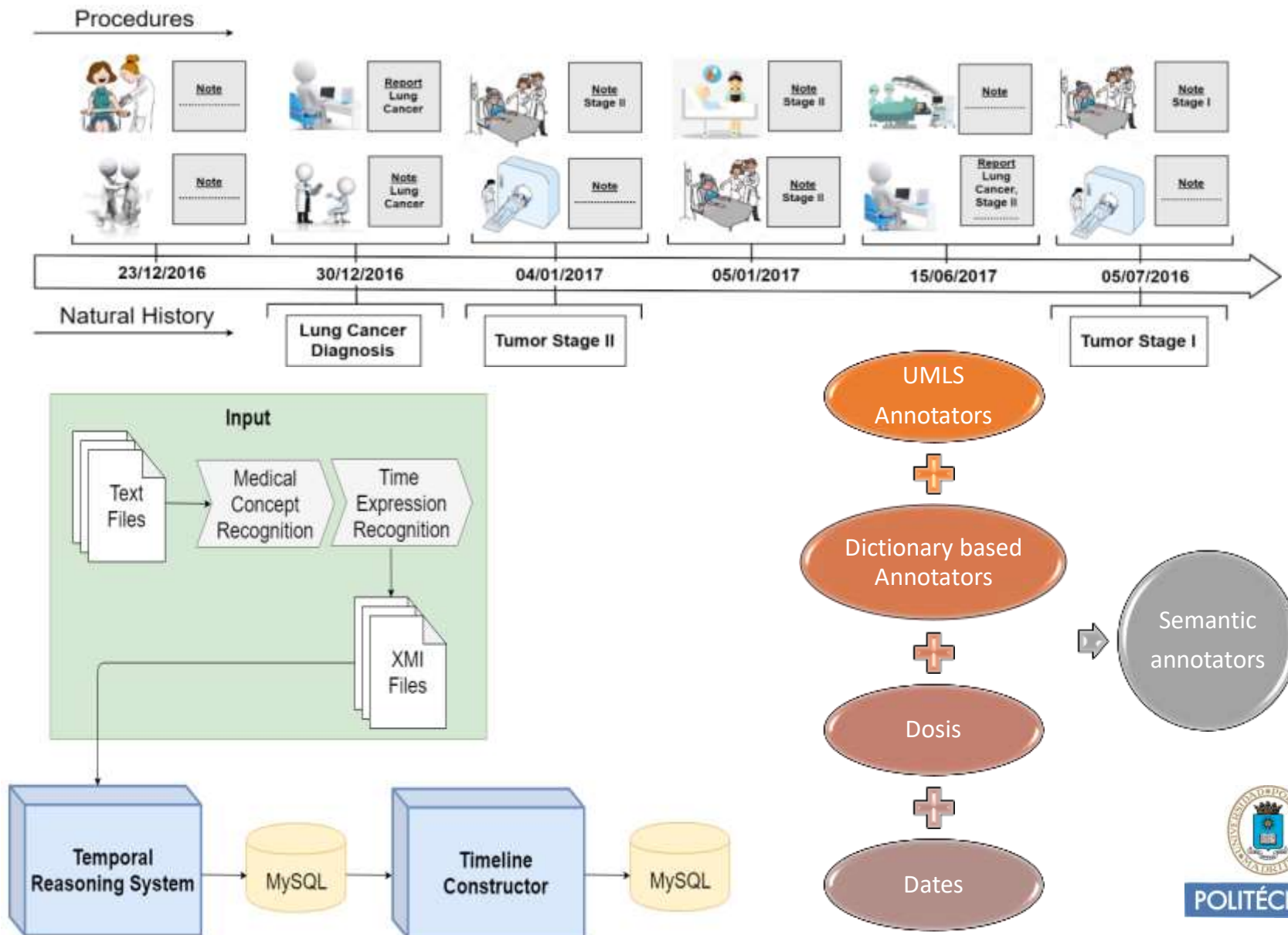
Data analytics: Expertise in applying data mining to several domains with special emphasis in the biomedical domain.

Natural language processing: Retrieving knowledge from medical texts and Electronic Health Records (mainly) but also applied to other domains (for example: legal domain).

Image analysis: Automatic analysis and annotation of medical images (mainly) but also focused on geospatial imaging and other fields.



Patient Natural History reconstruction



Main Results: projects

- EIT-Health
 - Facet
 - Paphos
- H2020
 - CLARIFY
 - Bigmedilitycs
 - IASIS
 - CUREX
 - Flagship: Human Brain Project
- Plan Nacional
 - ND-Monitor (RTC)
 - DISNET (RTS)
- Art. 83
 - Proyecto MAVIS (MSD)

Data Analytics and PLN main publications

- Extracting Diagnostic Knowledge from MedLine Plus: a Comparison between MetaMap and cTAKES Approaches. Current Bioinformatics. 2016.
- Profiling lung cancer patients using electronic health records. Journal of Medical Systems. 2018.
- Lung Cancer Concept Annotation from Spanish Clinical Narratives. 13th International Conference on Data Integration in the Life Sciences 2018 (DILS2018). 2018.
- Increasing the UAV data value by an OBIA methodology. SPIE Remote Sensing 2017. 2017.
- Evaluating Wikipedia as a source of information for disease understanding. 31st IEEE CBMS International Symposium on Computer-Based Medical Systems. 2018.
- Applying Data Science methods and tools to unveil healthcare use of lung cancer patients in a teaching hospital in Spain. CLINICAL & TRANSLATIONAL ONCOLOGY. 21 - 11, pp. 1472 - 1481. 2019. ISSN 1699-048X
- Importance of medical data preprocessing in predictive modeling and risk factor discovery for the frailty syndrome. BMC MEDICAL INFORMATICS AND DECISION MAKING. 19 pp. 0 - 17. 2019. ISSN 1472-6947
- CBMS'19 organization

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THANKS!

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