Information and Networking Event
Horizon Europe 2023 Calls
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HORIZON-HLTH-2024-DISEASE-08-20: Pandemic preparedness and response: Host-pathogen interactions of infectious diseases with epidemic potential
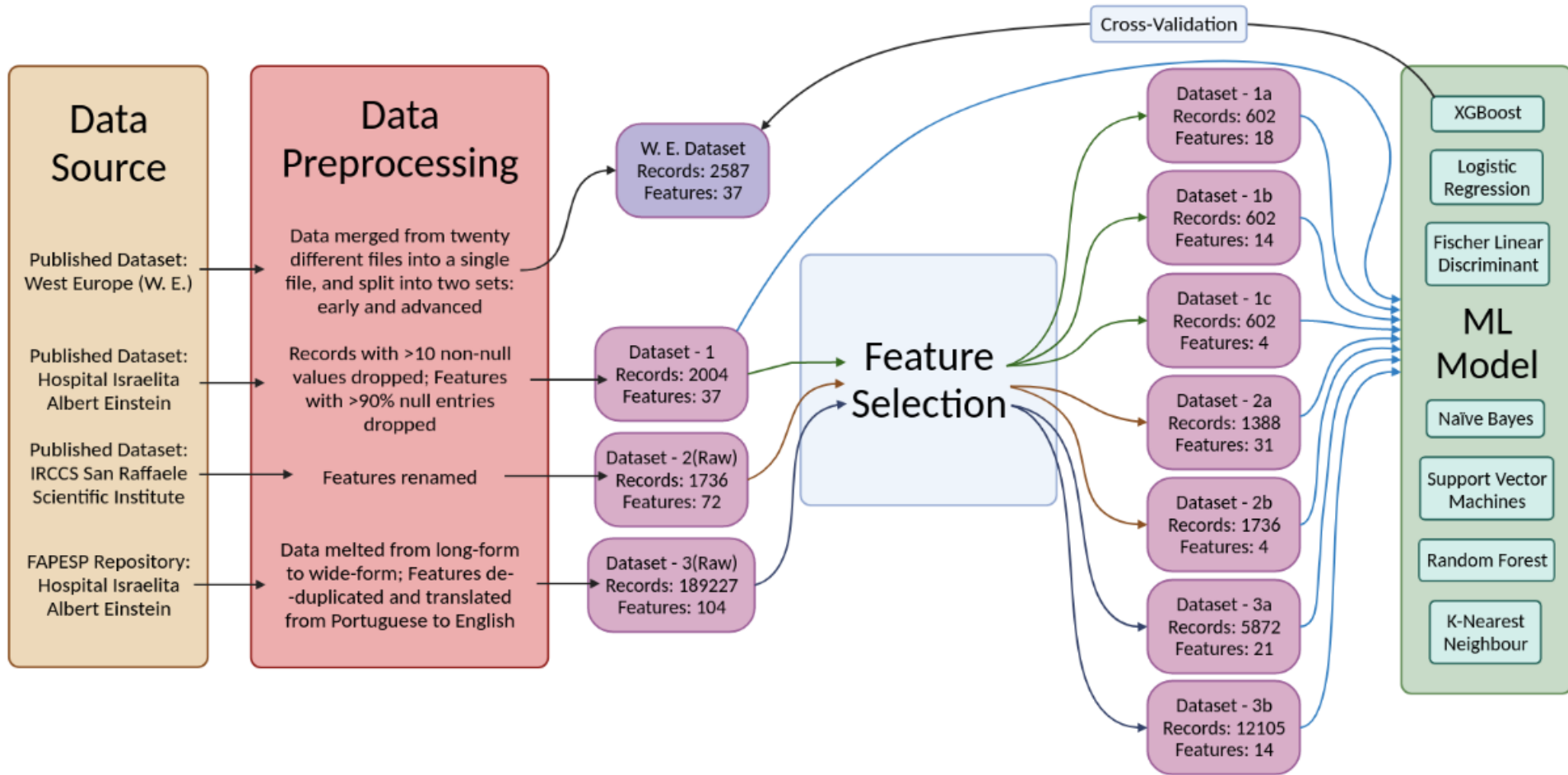
Friday, 13 October 2023

- TITLE of talk: Development of COVID-19 prediction tool based on hematological parameters derived across the populations and integrated on machine learning platform
- Name of presenter: Dr. Debashree Bandyopadhyay
- Name of Organisation: Birla Institute of Technology and Science, Pilani, Hyderabad Campus
- Country: India
- Your contact: banerjee.debi@Hyderabad.bits-pilani.ac.in
- Your web url: https://www.bits-pilani.ac.in/hyderabad/debasri-bandyopadhyay

Project proposal title: Development of COVID-19 prediction tool based on hematological parameters derived across the populations and integrated on machine learning platform

- Topic to be addressed:
  - Data collection
  - Data processing
  - Building and validation of the ML models
- Project description (brief)
- Current consortium (if any): Birla Institute of Technology and Science, Pilani, Hyderabad Campus and ESI Hospital Hyderabad, India
- Profile of the partners sought (type, skills, role, etc.): Clinicians, hospital records
- Key words: Machine Learning, hematological parameters, performance metrics

Preliminary data

Data collected from three different demography – Italy, Brazil and West Europe

Expected outcome of the project

- Developing a machine – learning model based on hematological parameters that can be used across the populations

- Pre-requisite for the study –
  - Hematology datasets from more number of populations
  - Optimize the parameters that will work universally across the populations
  - Train the models on different datasets

Current consortium

- To collect the data from Indian population, we are working in collaboration with Employees' State Insurance (ESI) hospital, Hyderabad, India

Profile of the partners sought (type, skills, role, etc.)

- Hospital records (for data collection and retrieval)

- Clinician (hematological data analysis and interpretation)

Benchmarking the model

- Benchmark the datasets with different machine-learning and deep-learning models

Instructions for flash presentation

- The presentations will last no more than **7 minutes**.
- Submit your presentation to researchinnovationeu@gmail.com and india@euraxess.net

Please note:

- the presentations should be in English

- do not overload your slides – provide links to additional material available on the web

- do not use videos, etc. – this might not work with the IT system used

- please submit your flash presentation at the earliest

- all submitted flash presentations will be made available on the our website

- send your flash presentation to researchinnovationeu@gmail.com and india@euraxess.net

Contact details (edit)

Do not forget to add:

- Prof. Debashree Bandyopadhyay, banerjee.debi@hyderabad.bits-pilani.ac.in

- Birla Institute of Technology and Science, Pilani, Hyderabad, India

- the nature of your organisation: academic institution (private)

- the country from which it operates: India