Measuring Observable Influence & Impact of Scientific Research Beyond Academia

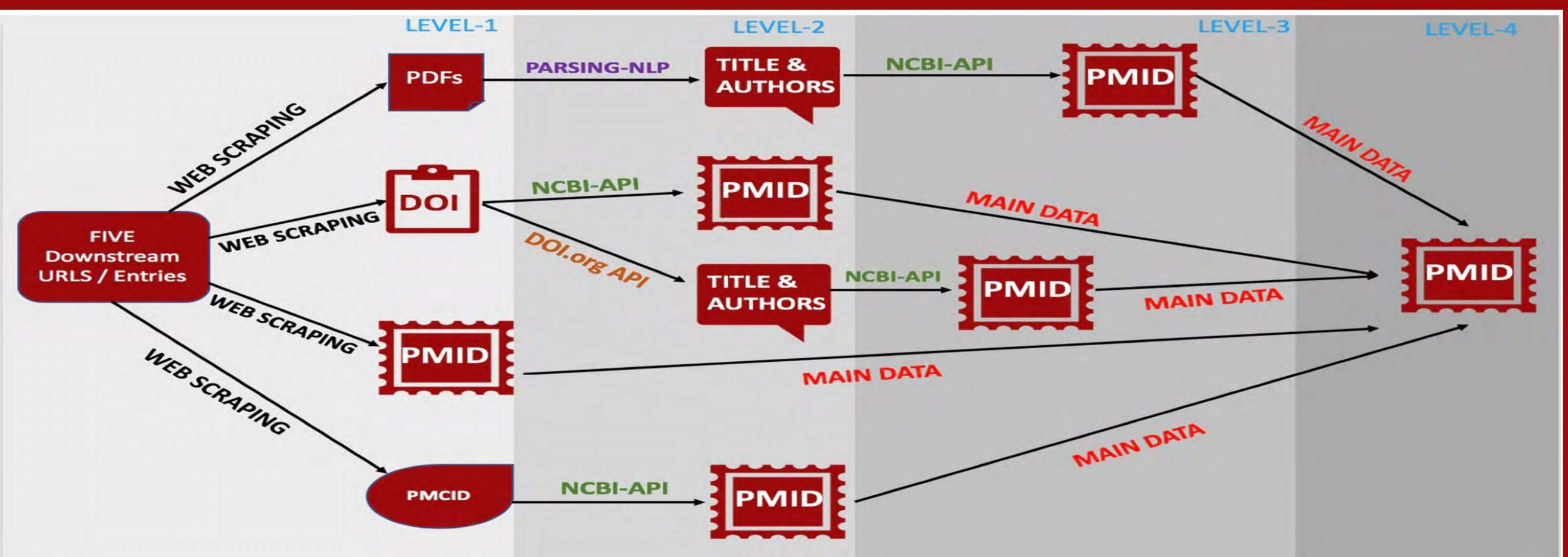
Team: abraca-data- Honghui Wang | Shray Khanna | Chhavi Verma

MOTIVATION

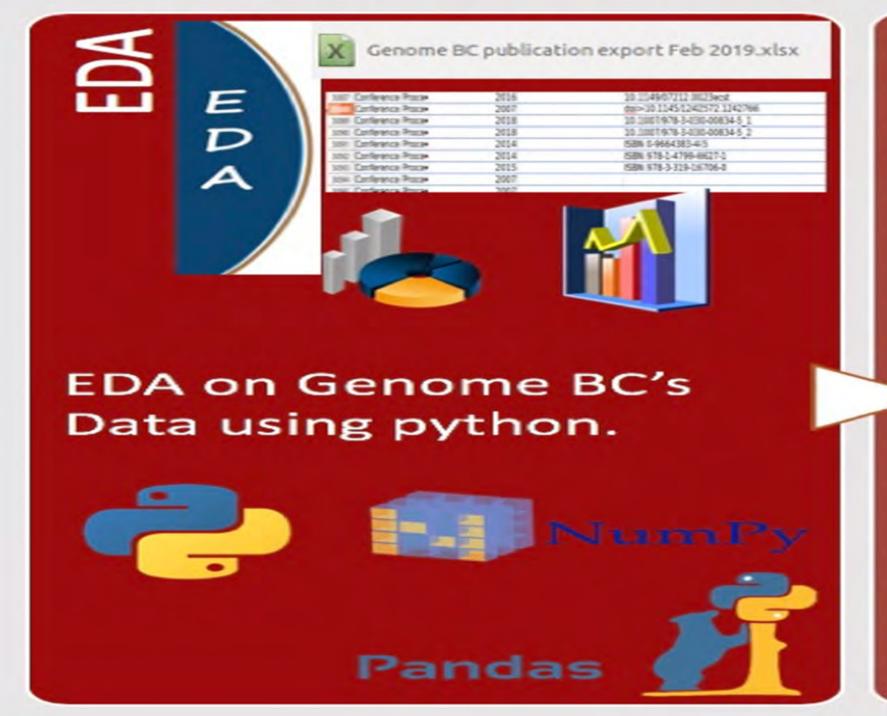
- > Checking impact of research publication in Ilealthcare.
- > Make healthcare research more impactful and beneficial to people.
- > Help researchers understand Real World impacts of their publication in Healthcare.

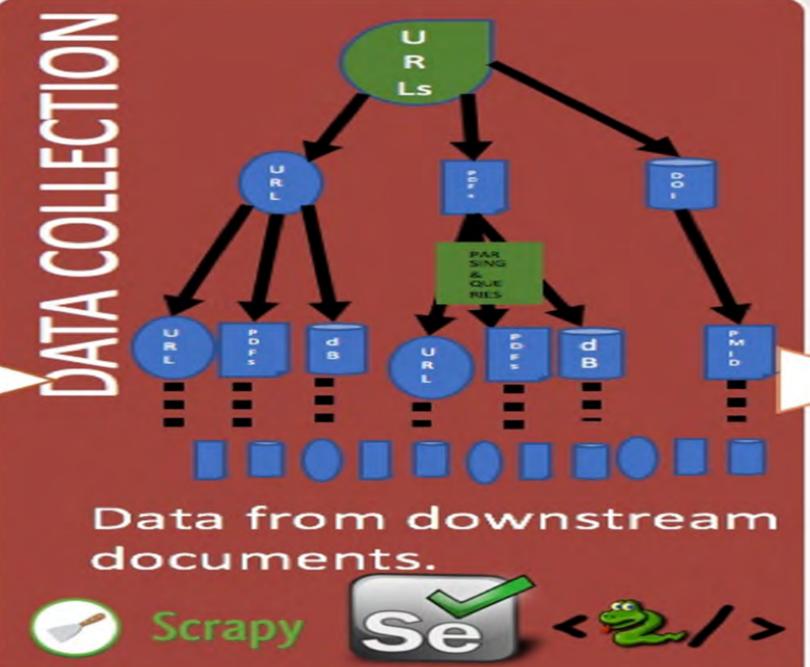
CHALLENGES

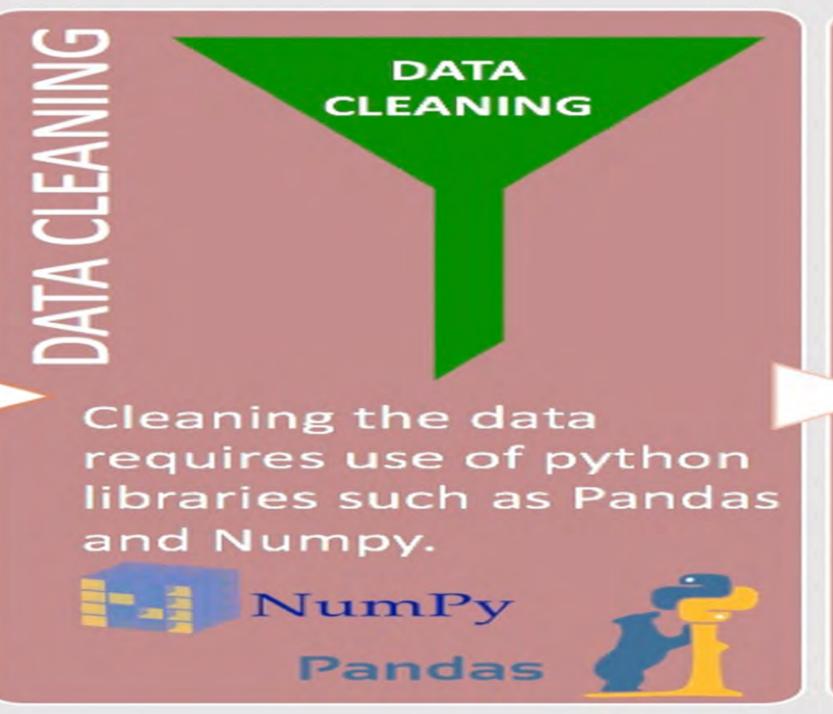
- > Data Collection is the biggest challenge we face.
- > References from downstream data is collected after going through each level.

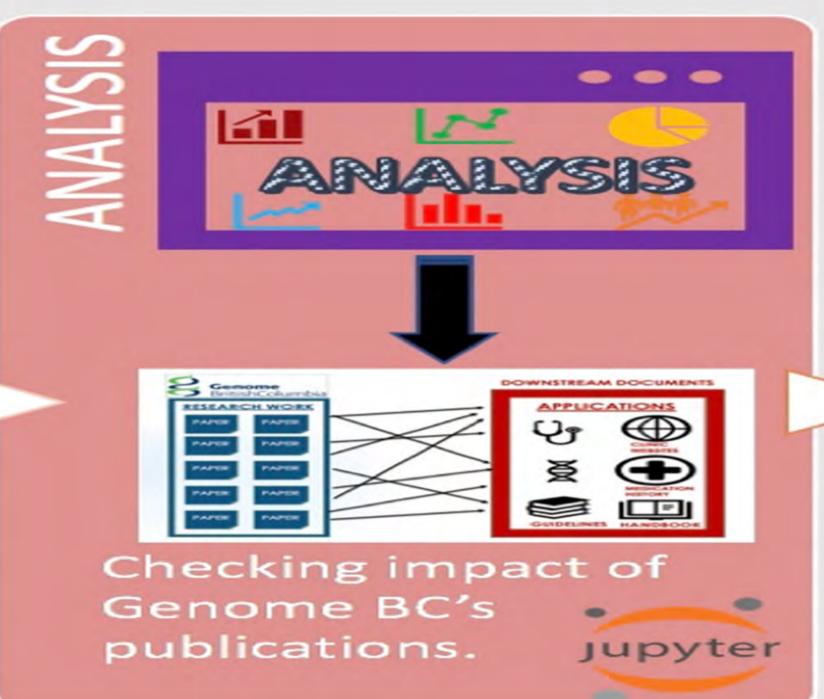


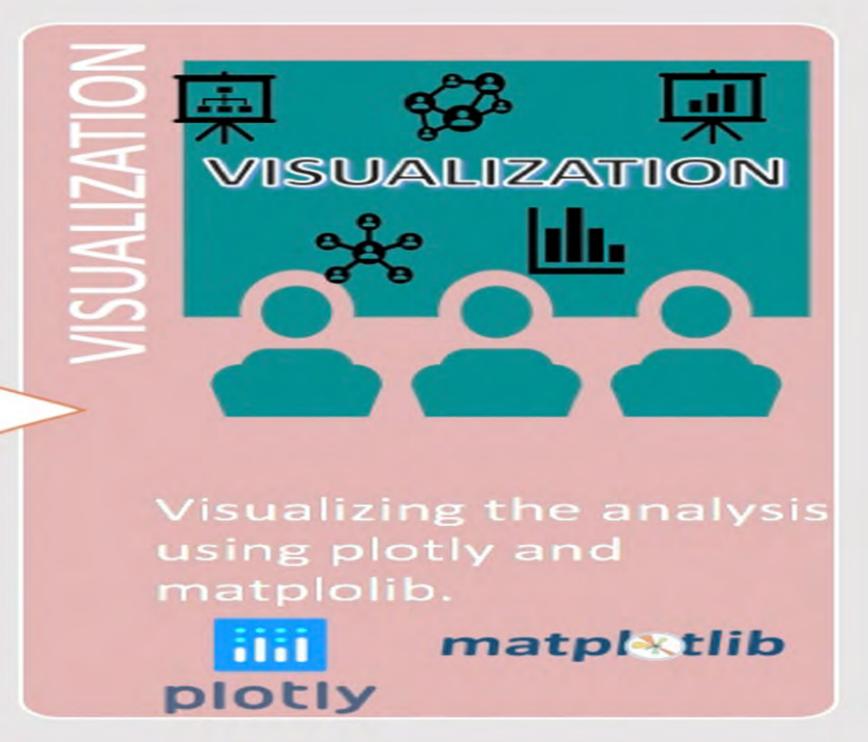
DATA SCIENCE PIPELINE



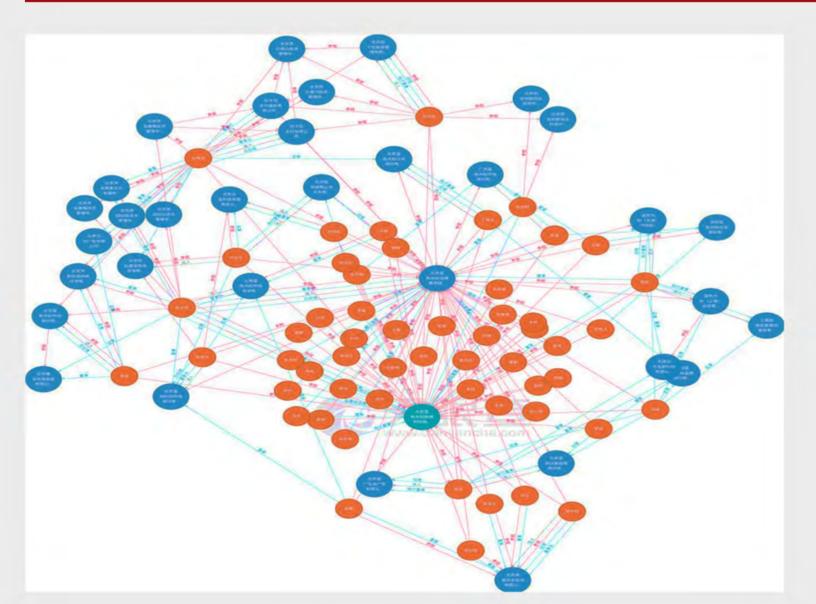








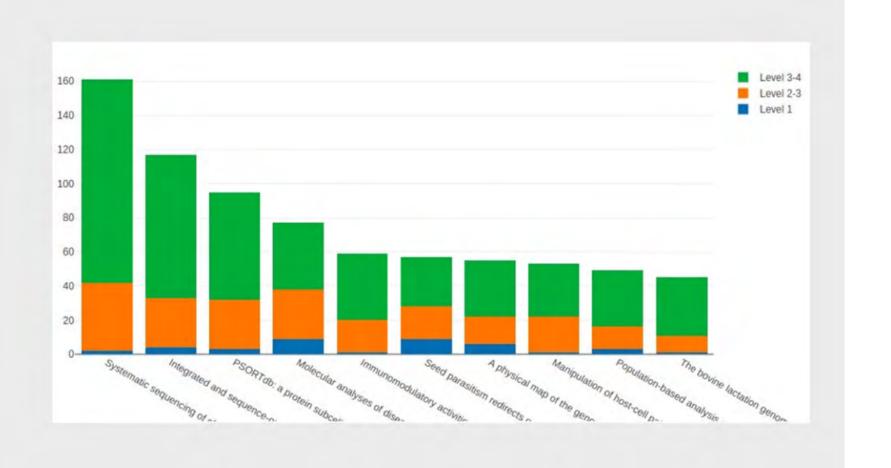
RESULTS AND VISUALIZATION



Left Picture:-

The red circles denote the publications of Genome BC While the blue circles denote the entities from the five downstream documents we have.

The more the connections of a Genome BC publication, the more impactful the publication is.



Right Picture:

We are observing the depth of a particular publication of Genome BC

The y axis shows the total count A directly referenced paper will have more green colour

FUTURE WORK

Use more clues, like DOI, Titles, pptx and docx files, to make connection between downstream documents to academic papers. This require more time and labor as every clue need a specific rules to extract the info.

Design an interactive frame work allowing user to design the rules for the situation that our parser can not figure out.

Use commercial tools like Cemine to parse the pdf file more precisely. This needs financial support from Genome BC.



ACKNOWLEDGEMENT

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