DIG-UM Topic Group Big Data Analytics

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We need YOU

Join the mailing list! erum-data-big-data-analytics@lists.rwth-aachen.de

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erum-data-big-data-analytics-request@lists.rwth-aachen.de

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How to analyze the data from ErUM? Ask the Al.

https://chat.openai.com/chat

What is the best method to analyze the large amount of data taken at large scale hadron [0] and nuclear collider experiments?



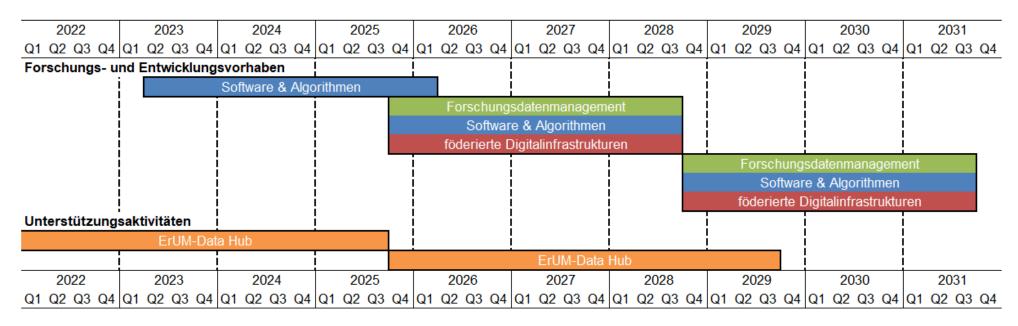


There are several methods that can be used to analyze large amounts of data from large scale hadron and nuclear collider experiments. One of the most effective methods is to use machine learning algorithms, which can be trained to identify patterns and correlations in the data that may not be immediately apparent to researchers. Other methods that can be used to analyze large data sets include statistical analysis, data mining, and visualizations such as graphs and plots. In general, it is important to use a combination of different methods to ensure that the data is thoroughly analyzed and that any relevant patterns and correlations are identified.

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We have heard the Al-gods...

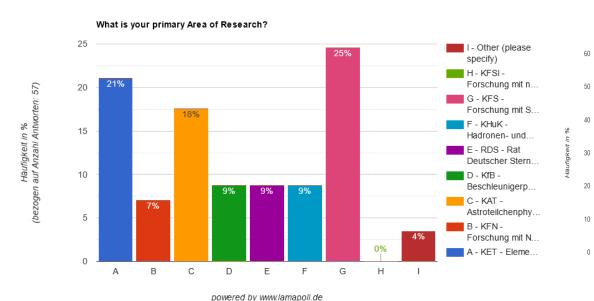
Software & Algorithmen, First TG to deal with a call,

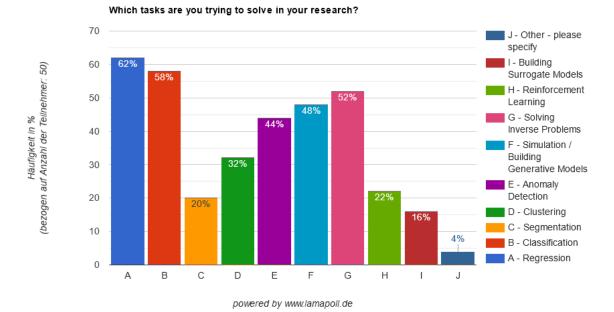


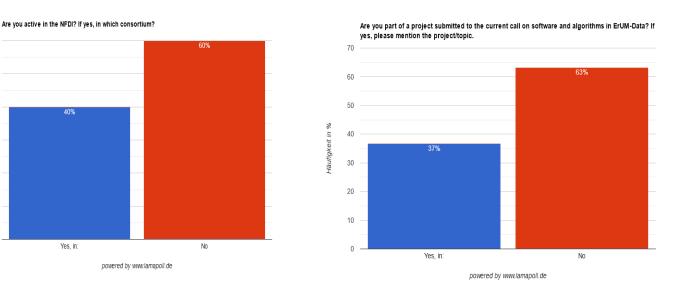
- ErUM-Data Call "Software und Algorithmen" came out before the Topic Group was constituted.
- All applications where submitted before our first meeting Challenges in the last half year:
- 1. Follow the course of the call and try to asses the outcome. Understand the results.
- 2. Find out: Which interests do the communities have according to the calls topics.

Results of Poll

- Running since 23. Mai 2022, 17:53.
- https://survey.lamapoll.de/Big-Data-Analytic-Kopie/
- 68 Participants, reasonably representative
- 20 questions. Detailed analysis not possible here but available.
- Participation from almost all Communities.
- Broad interest spectrum.
- NFDI contribution and overlap.







Aftermath of first ErUM-Data funding call 'Software & Algorithms'

- We tried to collect information to assess and understand the outcome.
- Approval for 10 groups, ~19% of 52 applications, i.e., even groundbreaking ML projects are not funded.
- Main misunderstanding: BMBF does not want to fund digitization projects that could 'save' ErUM-Pro funding.

What should happen now?

- 1. Organize those groups who received funding within DIG-UM.
- 2. What can be done to also coordinate the needs of the groups which have not received funding but may be important for the communities.

A networking workshop will be organized:

- 23.2.2023 (noon) to 24.2.2023 (noon) at DESY Campus in Hamburg.
 https://indico.desy.de/event/36573/
- Invited are: ErUM-Data, DI-GUM, PUNCH und DAPHNE and PT-DESY
- Goal is to discuss how funded and non-funded groups can connect.
- Are there alternatives to ErUM-Data funding?

Later

- After the call is before the call.
- The next step is to be better prepared for the next round.
- Different communities have already begun to formulate their digitization strategy and how their needs may fit e.g. into ErUM-PRO and ErUM-data as well as other ErUM funding lines.
- The TG is a good place for exchange about these efforts and help the committees to find a common strategy.

All this will not work without your help and participation: Please join the mailing list and come to meetings which will be organized.