

*Human interactions, computing
systems, software and interfaces*
(Topic IV)

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Topic includes ...

- Visualization
- Scientific and development workflows - including human components
- Regression and validation software/processes
- New computer hardware architectures: short, medium, long term,
 - multi-threading
 - HPC capability (distributed parallelism)
- Software frameworks and interfaces
- Organization of common/shared components, including policies

Guidelines

- Reminder:
 - Our goal is to collect information that will be used to fill in the section for topic IV.
 - Under our topic are subsections with clusters of “requirements”.
- Keep in mind ...
 - The primary roles: Algorithm developer, algorithm tester/validator, and science data analyst.
 - That open discussion about this topic is most important
 - Refinement will be an ongoing project
- Timeline:
 - Discuss use cases and scenarios. (1 hour)
 - Move from use cases to requirement statements. (1 hours)
- Notes for running a session are here
 - https://cdcvs.fnal.gov/redmine/projects/lartpc-requirements/wiki/General_session_instructions

Issues to handle as we proceed

- Clarifying the differences between tasks of:
 - algorithm development,
 - analysis,
 - automated reconstruction
- Common language: make sure we are speaking about the same thing (fill in glossary if needed)
- How do we share things other than just code
 - documentation
 - writing papers jointly between members of different experiments

Where to start

- The “requirements” currently in the document are intended as seed for discussion.
 - We can elaborate upon them.
 - We can add new ones.
 - We can modify what is unclear or inappropriate.
- We’ll be most productive if we primarily add to what others have said
 - remember we are discussing many related use cases and requirements
 - modification for clarity is important; modification to turn use case A into use case B is usually not what we want