



Team

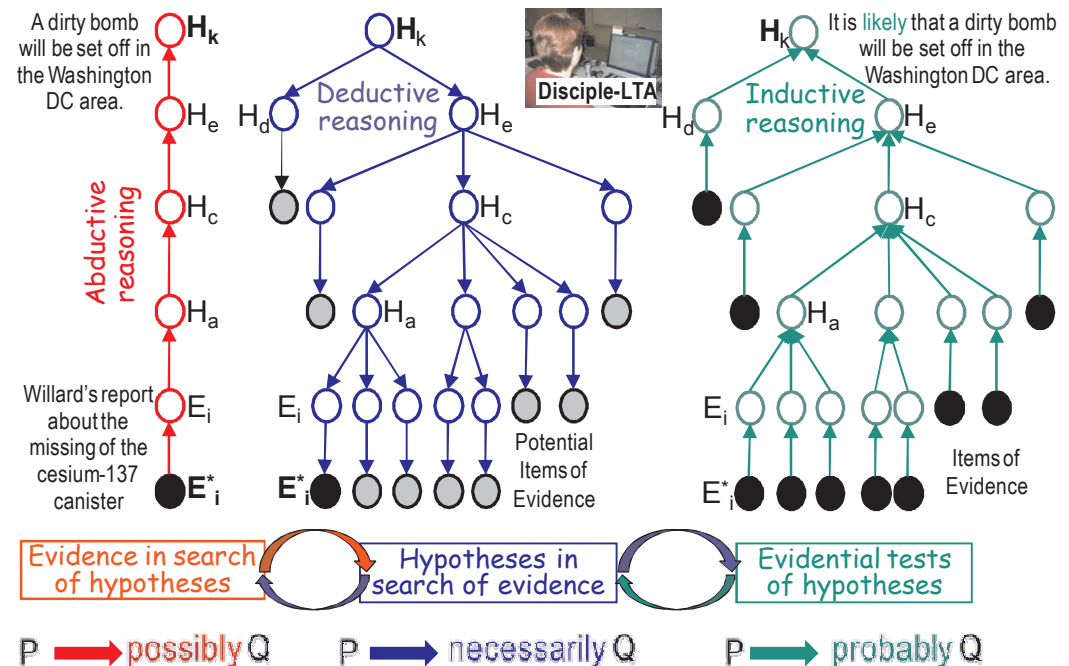
- **Organization:** *Learning Agents Center, School of IT and Engineering, George Mason Univ.*
- **Lead Investigator:** *Dr. George Tecuci, Professor of Computer Science*
- **Current Team Members:** *Dr. David Schum (Prof. of Systems Engineering, Operations Research, Law, and Science of Evidence) and Dr. Mihai Boicu, Assistant Professor of Applied Information Technology*



Research Area

Cognitive assistants for intelligence analysts, capable of:

- discovering hypotheses from masses of information of all kinds that come from a variety of different sources;
- analyzing hypotheses to guide the discovery of new evidence;
- assessing the likelihood of hypotheses by developing arguments that establish and fuse the relevance, believability and inferential force of various types of evidence.



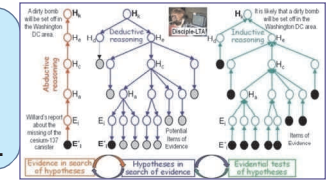


Capabilities

LAC develops cognitive assistants that can learn complex expertise directly from expert analysts, can support analysts in hypothesis analysis, collaboration and sharing of intelligence, and can teach its analytic expertise to new analysts.

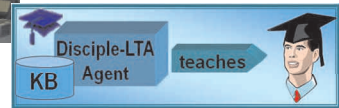
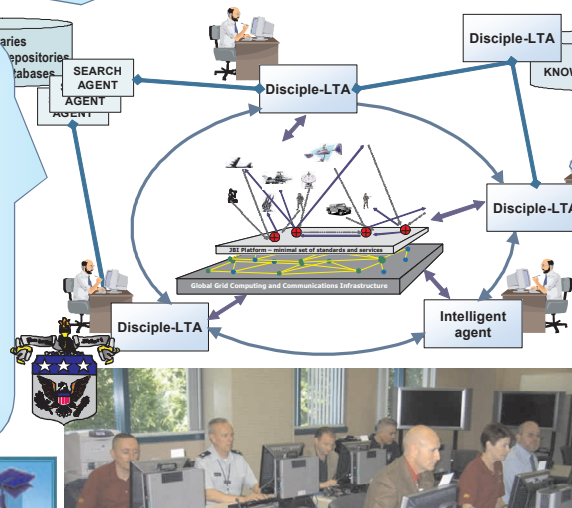
They are based on:
 Science of Evidence,
 Mixed-initiative
 reasoning, Multi-
 strategy learning,
 Collaborative
 analysis,
 Assumption-based
 reasoning, etc.

Analytic Assistance
 Empowers the analysts through mixed-initiative reasoning for hypotheses analysis, collaboration with other analysts and experts, and sharing of information.



Learning
 Rapid acquisition and maintenance of intelligence analysis expertise which currently takes years to establish, is lost when experts separate from service, and is costly to replace.

Tutoring
 Helps new intelligence analysts learn the reasoning processes involved in making intelligence judgments and solving intelligence analysis problems.





Teaming

Capabilities we are seeking:

- Knowledge discovery capabilities over a single corpus of data;
- Ontology-based alignment of data models;
- Advanced natural language processing;
- Both industrial and university partners.



Contact Information

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