REASON

RAPID EXPLANATION, ANALYSIS AND SOURCING ONLINE

INTELLIGENCE VALUE

REASON aims to develop novel technologies that will enable intelligence analysts to substantially improve the evidence and reasoning in draft analytic reports. Intelligence analysts sort through huge amounts of often uncertain and conflicting information as they strive to answer intelligence questions. REASON will assist and enhance analysts' work by pointing them to key pieces of evidence beyond what they have already considered and by helping them determine which alternative explanations have the strongest support. It will do this automatically and on demand by providing evidence and reasoning suggestions as the analyst works on a report. The program will exploit recent advances in artificial intelligence, not to do the analysis or write the report, but to help analysts write stronger reports. As a result, decision-makers will receive analytic reports with the highest accuracy, clarity and timeliness.

Decision makers rely on the Intelligence Community to help them understand a wide variety of complex issues. Intelligence analysts face numerous challenges in their efforts to produce high-quality analytic reports. One major challenge is finding all relevant evidence from an ever-growing collection of often uncertain and conflicting information drawn from classified and unclassified sources. A second challenge is making well-reasoned judgments in the face of uncertainty. REASON will develop technology that analysts can use to discover additional relevant evidence (including contrary evidence) and to identify strengths and weaknesses in reasoning.

REASON is not designed to replace analysts, write complete reports, or to increase their workload. The technology will work within the analyst's current workflow. It will function in the same manner as an automated grammar checker but with a focus on evidence and reasoning.

Performer teams will conduct research and development to build systems that will be evaluated by an independent testing and evaluation (T&E) team. Independent T&E will ensure that REASON is effective in helping analysts discover valuable evidence, identify strengths and weaknesses in reasoning, and produce higher quality reports.

PRIME PERFORMERS
- TBD

TESTING AND EVALUATION PARTNERS
- TBD

KEYWORDS
- Analytic Reasoning
- Artificial Intelligence
- Information Retrieval
- Human Language Technology
- Argumentation
- Human-Computer Interaction