

Advanced Belief Reasoning in Intelligence

US Army Research Labs Connect Research Program Period: 2014 - 2019



AFSecurity

October 2015

Advanced Belief Reasoning in Intelligence



Focus:

- Intelligence analysis
- Analytics tools
- Subjective Logic
- Bayesian networks

Partners:

- US Army Research Lab
- University of Oslo
- University of Padova





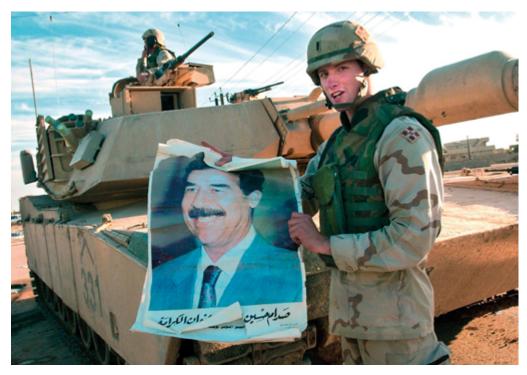


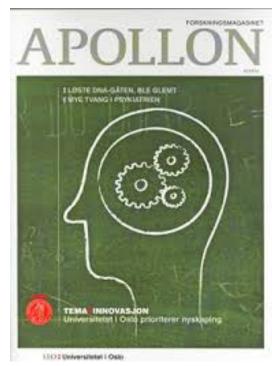
Università degli Studi di Padova



Better intelligence services based on a new mathematical logic from UiO could have

averted the attack on Saddam





April 2015

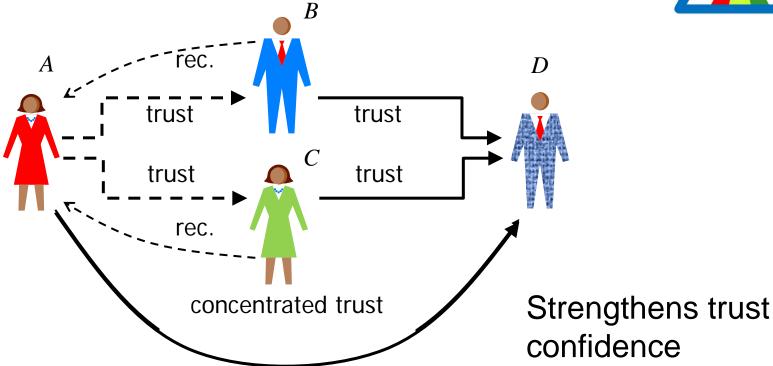
Trust transitivity



Thanks to Bob's advice, Alice trusts Eric to be a Alice **Eric** good mechanic. Indirect functional trust Direct referral trust Bob Direct Bob has proven to Alice that functional trus he is knowledgeable in matters relating to car maintenance. Eric has proven to Bob that he is a good mechanic. Recommendation

Trust fusion characteristics





Computed with the fusion operator of subjective logic

Graph notation: $[A, D] = ([A; B] : [B, D]) \diamond ([A; C] : [C, D])$

Subjective Network



