

- Organization(s): Haystax Technology
- Lead Investigator: Robert C. Schrag, Ph.D.
- Current Team Members: (Open)



### **Research Areas**

Processing Events in Probabilistic Risk Assessment (STIDS 2014)

- Large-scale risk model development: <u>Qualitative Bayesian</u> <u>network specification</u>. Our model "Carbon" is...
  - Domain expert-accessible (with GUI support)
  - Based on Adjudicative Guidelines and Desk Reference
  - Comprehensive: 100s of random variables
  - Focusing: adjudicators/investigators see highest-impact cases.
- Holistic coarse-to-fine (public records-to-computer network logs) event processing with...
  - Coarse-to-fine temporal relevance accounting
  - Event impact assessment over arbitrary time scales



# **Unique Qualifications**

#### Carbon model is...

- Deployed in the US Army's Person-event Data Environment (PDE), applied to broad enterprise data
- Entering its 3<sup>rd</sup> major US Army development contract
- The IC-leading algorithmic solution for <u>continuous</u> <u>evaluation</u> of trusted staff security clearanceworthiness.

#### Haystax has...

 Person-centuries of modelbased risk assessment experience.



# **Teaming Objectives**

- Complementary skillsets (Track 1):
  - Learning / validating models from data
  - Extracting, into a formal ontology, actionable events from unstructured text and computer network logs
  - Threat process psycho-social modeling
  - Threats beyond information disclosure, IT system exploitation



# **Contact Information**

- Robert C. Schrag, Ph.D.
- Chief Scientist, Haystax Analytics
- Haystax Technology
- bschrag@haystax.com
- 571-279-3763
- <u>www.haystax.com</u>