

# Social Relationship Identification

- For use with Informal, Online Communication Archives

## Market Need

Currently, informal online communication archives (such as those for email) are often ambiguous, incomplete and context-dependent; making it virtually impossible to analyze large archives to link groups of people with particular topics. For national security, military or police purposes two basic questions need to be answered:

- Who's communicating with whom?
- What are they communicating about?

## APL Solution

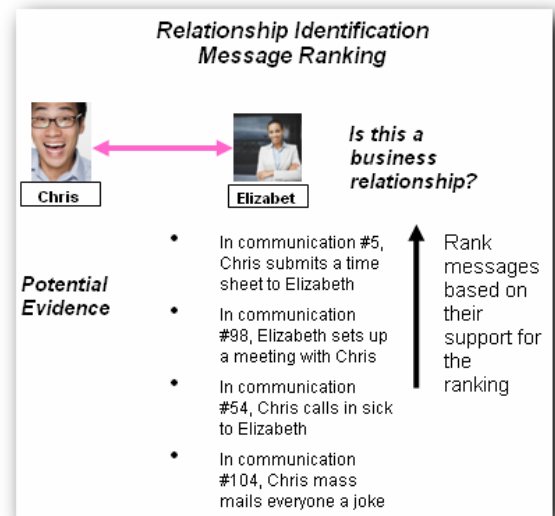
The JHU/APL Social Relationship Identification technology facilitates performing group detection and social network recognition within email archives through link mining. Machine learning is used to train a system to rank order relationships and messages in an ego network based on labeled examples of relevant and irrelevant relationships. Then relevant relationships are ranked higher than irrelevant relationships. Through this process the JHU/APL technology exploits the communication patterns among people to link groups of people and to link them to a particular topic.

## Technology Status & Intellectual Property

This concept and supporting developments are Copyright Protected.

## Commercial Applications

- National Security
- Military
- Police



## Availability

This technology is currently available for licensing.

### Technical Point of Contact:

Chris Diehl, Inventor  
christopher.diehl@jhuapl.edu

For Licensing Information, Contact:  
JHU/APL Office of Technology Transfer

Norma Lee Todd  
Technology Manager  
Phone: (443) 778-4528  
FAX: (443) 778-5882  
norma.todd@jhuapl.edu

# APL

The Johns Hopkins University  
APPLIED PHYSICS LABORATORY



Office of Technology Transfer