

iSchools and the DARPA Network Challenge

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ABSTRACT

In celebration of the 40th anniversary of the internet, DARPA launched the Network Challenge to explore issues related to social networking, collaboration, and trust. The iSchools viewed this as an excellent opportunity to achieve multiple goals: (1) to conduct a collaborative research project of interests across multiple iSchools, (2) to enhance the visibility of the iSchools, (3) to collect data for future research regarding social networking and extreme events, whether they occur in the physical space or in the cyber space, (4) to participate the challenge to win. The iSchools DARPA Challenge Team was thus formed.

Keywords

Collaborative research, social networking, trust.

1. INTRODUCTION

This panel will discuss the background of this iSchool project and reflect on how events transpired. After considerable discussion, a strategy centered on the creation of a private network of people associated with iSchools was selected. These people were on- and off-campus students, alumni and faculty and staff of the iSchools. The communications technologies included telephone calls, emails and text messages. Messages were collected and validated by a virtual command center; this command center was also tasked with gathering data from the public internet.

The operation of the virtual command center consisted of three subgroups: the physical search group for processing reports from observers, the cyber search group for using crawlers to monitor the cyberspace; and the visualization group that integrates information into a geo-visual display. While there was

a significant amount of information gathered in real-time from crawling the web, the information needed to be verified to distinguish correct DARPA balloon locations from fake ones. This required gathering additional information using crawler or human observers, and correlating multiple types of information (text, images, Google Earth) from multiple sources.

With the goal to reflect, enrich, and share the experience of the iSchools-DARPA Challenge team, the panel will discuss questions including, but not limited to, the following:

-What were the background and the motivation for forming the iSchools DARPA Challenge Team?

-What was the process for forming the team? Can the process be used for future i-School projects?

-How was the message crafted and distributed through the network of iSchools?

-What were the similarities and differences between the approach taken by the iSchools versus those taken by other groups (e.g., MIT's effort)?

-How effective was the physical search and the cyber search efforts, and what were the interactions between them?

-How did the team distinguish correct and fake information?

-What data were collected from the DARPA challenge? How can iSchools leverage these data for future research?

-What were the lessons learned from the DARPA Network Challenge? What were implications of these lessons to broader research questions?