

Terrorism Informatics: A Researcher's Best Friend

Internet search engine concept paper – collaboration between ICPVTR and SCE – win international award

The Internet – and Google – has come as a blessing to many, particularly in this information age where facts and figures are expected to be at our fingertips. However, the vastness of data available can mean hours of manual trawling of the World Wide Web for the researcher, which takes time away from actual analysis. This enormity of the job – from filtering to collating, to putting together scraps of information to form a coherent picture for subsequent analysis – spurred on the quest for some technological help. The International Centre for Political Violence and Terrorism Research (ICPVTR) at IDSS partnered the NTU School of Computer Engineering (SCE) and the Centre for Advanced Information Systems (CAIS) to develop an award-winning paper conceptualising new software tools for gathering and analysing terrorism data off the Internet. The paper is co-authored by Associate Professor Rohan Gunaratna and Mr Ong Teng Kwee from ICPVTR, and Associate Professor Lim Ee Peng, Assistant Professor Chang Kuiyu and a Mechanical Engineering student, Mr Sun Zhen from SCE.

Titled "Event Driven Document Selection for Terrorism Information Extraction", it won the best paper award at the 3rd IEEE International Conference on Intelligence and Security Informatics (IEEE ISI-2005) held in Atlanta, Georgia. It presents some interesting methods for selecting relevant documents from a mass collection, which is especially useful to ICPVTR for its work on terrorism.

The Internet is the principal medium of communication by terrorists today, who are proficient in using the Web to disseminate propaganda, recruit, raise funds, and procure supplies.

Terrorist ideologues politicise and radicalise their members, supporters and sympathisers using the Internet. The operational leaders of terrorist groups also use the Internet to communicate and coordinate their operations.

"A solid understanding of the Internet, especially how the terrorists exploit this medium is critical for terrorism research. As terrorist groups and their supporters add several hundred documents to the Internet each day, it became necessary to develop a tool to selectively retrieve documents from the Internet," Head of ICPVTR Dr Gunaratna explained.



(From left) Mr Ong Teng Kwee, Associate Professor Lim Ee Peng, Associate Professor Rohan Gunaratna, Mr Sun Zhen.

With this in mind, the academics met the IT experts. Mr Ong Teng Kwee remembers the initial problems with the different terminologies. "It took us sometime to figure out what each other meant and the specific jargon we both use in our respective domains." Today, the basic prototype of the search engine's core component is already under development. The main requirement now is for the project to have sufficient funding to develop a fully integrated application – one that will hopefully allow academic researchers time for coffee as they breeze through the gazillion bytes of information with a few clicks of the mouse.