

# PRESS RELEASE

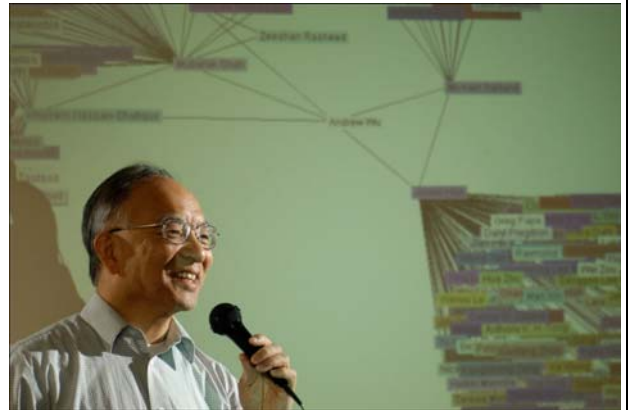
From the University of Illinois Information Trust  
Institute and the Department of Computer Science



## Illinois Receives Major U.S. Department of Defense Research Award for Secure Sharing of Information

The University of Illinois at Urbana-Champaign is part of a six-university collaborative cyber security initiative that has been selected by the U.S. Department of Defense to receive a projected 7-year, \$7.4 million grant.

The initiative, entitled “A Framework for Managing the Assured Information Sharing Lifecycle,” received the award in the form of a Multidisciplinary University Research Initiative (MURI) grant from the Air Force Office of Scientific Research. The University of Illinois portion of the work, which is expected to receive approximately \$1.25 million of the award, will be led by Professor Jiawei Han of the Department of Computer Science and the Information Trust Institute (ITI) at Illinois.



*Professor Jiawei Han, leader of the University of Illinois portion of a major new MURI award.*

Assured information sharing, or “AIS,” is the ability to share information at multiple levels of classification in a dynamic and secure manner, even when multiple agencies, or even multiple nations, are involved in the information sharing. In prosecuting the global war on terror, entities such as the Department of Defense, coalition partners, and first responders all need to share information to make effective decisions, but confidentiality of sensitive information must be preserved. Traditional security policies have been based on a “need to know” approach in which various participants may have rigidly specified pre-authorizations to view specific kinds of data. The 9/11 Commission, among its recommendations for guarding against future terrorist attacks in the U.S., stated that a move from the “need to know” mentality to a flexible “need to share” mentality could improve outcomes by increasing the agility and trustworthiness of information systems.

The newly funded research initiative has been designed to help achieve that vision by defining an “AIS lifecycle (AISL)” and developing a software framework to realize it. The AISL will manage the different phases involved in the process of sharing information: information discovery and advertising; information acquisition, release, and integration; and information use and control.

Professor Han, the Illinois leader, is an expert in data mining, data warehousing, database systems, spatiotemporal data mining, stream data mining, bio-data mining, and Web mining. His other ongoing work includes a project on on-line mining of anomalous moving objects for security protection, which he is conducting in the Boeing Trusted Software Center in the Information Trust Institute at Illinois. For the new initiative, his team at Illinois will work on the information management aspects of the AISL research, by developing and prototyping new techniques for information quality management and validation, information search and integration, and information discovery and analysis. His co-principal investigator in the effort at Illinois will be Professor ChengXiang Zhai of the Department of Computer Science, whose

area of expertise spans several fields, including information retrieval, natural language processing, machine learning, data mining, and bioinformatics.

The other universities participating in the research coalition are Purdue University, the University of Maryland at Baltimore County, the University of Michigan, the University of Texas at Dallas, and the University of Texas at San Antonio.

The MURI program supports basic science and engineering research at U.S. universities that is critically important to national defense. The program focuses on multidisciplinary research efforts that intersect more than one traditional science and engineering discipline.

#### ***About the Department of Computer Science***

The Department of Computer Science at the University of Illinois is recognized throughout the world as a leader in computer science education and research, consistently ranked among the top 5 programs in the nation. The department and its graduates have long been at the forefront of modern computing beginning with ILLIAC in 1952, continuing through the most recent Internet era with YouTube and PayPal. For more information, visit [www.cs.uiuc.edu](http://www.cs.uiuc.edu).

#### ***About the Information Trust Institute (ITI)***

The Information Trust Institute is a multidisciplinary cross-campus research unit housed in the College of Engineering at the University of Illinois at Urbana-Champaign. It is an international leader combining research and education with industrial outreach in trustworthy and secure information systems. ITI brings together over 90 faculty, many senior and graduate student researchers, and industry partners to conduct foundational and applied research to enable the creation of critical applications and cyber infrastructures. In doing so, ITI is creating computer systems, software, and networks that society can depend on to be trustworthy, that is, secure, dependable (reliable and available), correct, safe, private, and survivable. Instead of concentrating on narrow and focused technical solutions, ITI aims to create a new paradigm for designing trustworthy systems from the ground up and validating systems that are intended to be trustworthy. For more information, visit [www.iti.uiuc.edu](http://www.iti.uiuc.edu).

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