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Intelligence and Security Informatics

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Proceedings



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Preface

The past two years have seen significant interest and progress made in national and homeland security research in the areas of information technologies, organizational studies, and security-related public policy. Like medical and biological research, which is facing significant information overload and yet also tremendous opportunities for new innovation, the communities of law enforcement, criminal analysis, and intelligence are facing the same challenge. As medical informatics and bioinformatics have become major fields of study, the science of “*intelligence and security informatics*” is now emerging and attracting interest from academic researchers in related fields as well as practitioners from both government agencies and industry.

Broadly defined, intelligence and security informatics is the study of the development and use of advanced information technologies and systems for national and homeland security related applications, through an integrated technological, organizational, and policy based approach. The First Symposium on Intelligence and Security Informatics (ISI 2003) was held in June 2003 in Tucson, Arizona. It provided a stimulating intellectual forum of discussions among previously disparate communities: academic researchers in information technologies, computer science, public policy, and social studies; local, state, and federal law enforcement and intelligence experts; and information technology industry consultants and practitioners.

Building on the momentum of ISI 2003, we held the Second Symposium on Intelligence and Security Informatics (ISI 2004) in June 2004 in Tucson, Arizona. ISI 2004 followed the tradition of ISI 2003 in bringing together technical and policy researchers from a variety of fields and in providing a highly interactive forum to facilitate communication and community building between government funding agencies, academia, and practitioners. From a technical perspective, we are very pleased to note that the papers accepted at ISI 2004 are of high quality and from diverse disciplines. Using ISI 2003 papers as a benchmark, there is a clear indication of tangible research progress made on many fronts both in depth and in coverage. In addition, several new research topics of significant practical relevance (e.g., trust management, information assurance, disease informatics) have emerged.

ISI 2004 was jointly hosted by the University of Arizona, the San Diego Supercomputer Center, and the Tucson Police Department. The one-and-a-half-day program included one plenary panel discussion session focusing on the perspectives and future research directions of government funding agencies, two invited panel sessions (one on terrorism research, the other on knowledge discovery and dissemination), 41 regular papers, six posters, and three panel discussion papers. In addition to the main sponsorship from the National Science Foundation, the Department of Homeland Security, and the Intelligence Technology Innovation Center, the symposium was also co-sponsored by several units within the

University of Arizona including: the Eller College of Business and Public Administration, the Management Information Systems Department, the Internet Technology, Commerce, and Design Institute, the Center for the Management of Information, the NSF COPLINK Center of Excellence, the Mark and Susan Hoffman E-Commerce Lab, the Artificial Intelligence Lab, and several other organizations including the Air Force Office of Scientific Research, the National Institute of Justice, and Silicon Graphics.

We wish to express our gratitude to all members of the symposium Program Committee and additional reviewers who provided high-quality, constructive review comments within an unreasonably short lead-time. Our special thanks go to the members of the symposium Organizing Committee, in particular, Mr. Chi-enting Lin, who provided significant help with managing the conference Website and compiling the proceedings, and Ms. Catherine Larson, who did a superb job in managing local arrangements. ISI 2004 was run as part of the workshop series of the Joint Conference on Digital Libraries (JCDL 2004). We wish to thank the JCDL staff for their conference support.

Our sincere gratitude goes to all of the sponsors. Last but not least, we thank Gary Strong, Art Becker, Michael Pazzani, Larry Brandt, Valerie Gregg, and Mike O'Shea for their strong and continuous support of this symposium and other related intelligence and security informatics research.

June 2004

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