

IOWA STATE UNIVERSITY

Department of Computer Science

Robert Stewart Distinguished Lecture Series

<http://www.cs.iastate.edu/department/rsdl.php>



Dr. Stephen Yau

Arizona State University

Thursday April 4, 2013

3:30pm, 207 Marston Hall

*Situation Awareness in
Applications of Services
and Cloud Computing*

During the past decade, rapid advances of mobile and embedded device technologies as well as services and cloud computing have made “computing anytime, anywhere” and more reachable than ever. Users now can access computing resources over the Internet from various mobile and stationary computing devices with the support of services and cloud computing infrastructures. Applications of services and cloud computing often require situation awareness for better QoS, including usability, adaptability and security, due to the dynamic environment and changes of users’ requirements. Substantial research has been done to develop techniques to incorporating situation awareness in various applications of services and cloud computing, including service discovery, composition, and execution, system monitoring and adaptation, authentication and access control as well as context discovery, acquisition and dissemination, situation analysis and recognition.

In this lecture, the challenges, current state of the art and future research directions on situation awareness in applications of services and cloud computing will be discussed.

Celebrating 10 Years

The Robert Stewart Distinguished Lecture is made possible by the generous contribution of Dr. Long Nguyen, who received his PhD from the Computer Science department in 1975. This annual event is held in honor of his mentor, Dr. Robert Stewart, Professor Emeritus and the first chair of the ISU Computer Science department. Researchers invited to be part of the RSDL are world-class scholars in their field. They include Turing Award winners, John Von Neumann Medal Recipients, members and Fellows of AAAS and Fellows of the ACM and IEEE. Their talks focus on their research work, but are intended for an informed, not expert audience. The RSDL is a public lecture. All are invited to attend and learn from some of contemporary computing’s greatest minds.



Dr. Stephen Yau is the director of Information Assurance Center and Professor of Computer Science and Engineering at Arizona State University (ASU), Tempe, Arizona. He served as the chair of the Department of Computer Science and Engineering at ASU in 1994-2001. Previously, he was on the faculties of Northwestern University, Evanston, Illinois, and University of Florida, Gainesville.

He served as the president of the Computer Society of the Institute of Electrical and Electronics Engineers (IEEE) and was on the IEEE Board of Directors, and the Board of Directors of Computing Research Association. He served as the editor-in-chief of IEEE COMPUTER magazine. He organized many major conferences, including the 1989 World Computer Congress sponsored by the International Federation for Information Processing (IFIP), and the IEEE Annual International Computer Software and Applications Conference (COMPSAC) sponsored by IEEE Computer Society. He was a general co-chair of the 2012 IEEE World Congress on Services, including CLOUD 2012, Web Services 2012, Services Computing 2012, Mobile Services 2012, and Services Economics 2012, held in Honolulu, Hawaii.

His current research includes service-based systems, cloud computing, cyber security, software engineering, mobile ad hoc networks and ubiquitous computing. He has received many awards and recognitions, including the Tsutomu Kanai Award and Richard E. Merwin Award of the IEEE Computer Society, the IEEE Centennial Award and Third Millennium Medal, and the Outstanding Contributions Award of the Chinese Computer Federation. He is a Life Fellow of the IEEE and a Fellow of the American Association for the Advancement of Science. He received the Ph.D. degree from the University of Illinois, Urbana in electrical engineering.