Contemporary Black Hat, White Hat Research in Information Security: Where are the Gaps?

Abstract
Scientific studies of information/computer security have been going on now since the early days of computers. In the earliest period (roughly 1954-1980), most studies were concerned with the IT artifact itself, how to build systems so there was an inviolable security kernel. Cryptography fit neatly into this general interest and encryption algorithms became a small industry. Interest in behavioral issues lagged and even today represents only a fraction of the intellectual fervor in technical issues that has dominated the academy. How would one go about enhancing our understanding of how and why black hats attack systems and the effectiveness of the responses of the white hat protectors? We review a few recent research publications to identify gaps in the literature and discuss why we need to change and improve our data about this critical phenomenon. There is certainly a need to design and create new IT security artifacts, and intriguing new approaches are outlined in this domain, but these overall gaps in research call out for new studies of hackers and anti-social terrorists.

Biographical Sketch
Detmar Straub is Regent's Professor of the University System of Georgia and the J. Mack Robinson Distinguished Professor of Information Systems at Georgia State University Robinson College of Business. He conducts research in the areas of Net-enhanced organizations (e-Commerce), information security, technological innovation, IS methodological issues, and international IT studies. His consultancies with industry have been in the areas of information security, e-Commerce, and technological innovation. He has published 165 plus papers in journals such as MIS Quarterly, Management Science, Information Systems Research, Organization Science, Journal of MIS, Journal of AIS, Information & Management, Communications of the AIS, IEEE Transactions on Engineering Management, Communications of the ACM, OMEGA, Academy of Management Executive, and Sloan Management Review. Detmar is currently Editor-in-Chief of MIS Quarterly and has served as Co-editor of DATA BASE for Advances in Information Systems, Senior Editor of MIS Quarterly, Information Systems Research, Journal of the AIS (JAIS) and DATA BASE, Associate Editor for Management Science as well as an editorial board member on a host of other journals. He is former VP of Publications for the Association for Information Systems. He was appointed an AIS Fellow in 2005. He is the 2008 winner of the Alumni Distinguished Professor Award at Georgia State University, given annually for high achievement in research, teaching and service in a faculty of 1,050 persons. For more information, please see http://detmarstraub.com