



## HealthCare.gov as an Example of Critical Infrastructure Insecurity

Just days before the rollout of **HealthCare.gov**, developers reported failed tests with as few as 500 to 2,000 concurrent users, while the system was supposed to be able to handle a grossly inadequate 50,000. The actual number of unique visitors who attempted to visit the site topped 9 million in the first week. Following the launch, it was learned that serious design flaws in the way that processing tasks were divided resulted in the system creating a denial of service attack on itself. Sensitive personal information was leaked and accounts were proven to be easily hacked using publicly available data. Issues with the Verizon data hub caused repeated multi-day shutdowns. Months later, the website still does not operate properly and the target of 7 million enrollments by the end of March seems like an impossibility. Scrutiny of the HealthCare.gov problems can shed insight on the dangers of multiple interdependencies, such as has been repeatedly warned about the vulnerability of the nation's electrical power grid and other critical infrastructures.

**Rebecca Mercuri** is the President of Notable Software, Inc. <[www.notablesoftware.com](http://www.notablesoftware.com)>, the company she founded in 1981. Her caseload has included matters involving contraband, child endangerment, murder, computer viruses and malware, financial fraud, wrongful work termination, class-action suits, copyright and patent infringement, and election recounts (most notably Bush v. Gore). Dr. Mercuri has provided formal testimony and comment to the House Science Committee, the U.S. Commission on Civil Rights, the Election Assistance Commission, the National Institute of Standards and Technologies, the U.K. Cabinet, and numerous state legislatures and municipal bodies. She is a senior life member of the Association for Computing Machinery (ACM), where she authored the Security Watch feature and numerous guest columns of Inside Risks for Communications of the ACM. She is a past Chair of the IEEE Princeton / Central Jersey Section, and also a co-founder of the Princeton ACM / IEEE Computer Society. Rebecca holds a Ph.D. from the School of Engineering and Applied Science at the University of Pennsylvania, and she performed post-doctoral research at Harvard's John F. Kennedy School of Government and the Radcliffe Institute for Advanced Study.

Date: Thursday, January 16, 2014, 8:00 pm.  
(Refreshments and networking at 7:30 pm.)  
Place: Small Auditorium, Room CS 105  
Computer Science Building, Princeton University  
Information: Dennis Mancl (908) 582-7086  
On-line info: <http://PrincetonACM.acm.org>

All Princeton ACM / IEEE-CS meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner is held at 6:00 p.m. at Ruby Tuesday's Restaurant on Route 1. Please send email to [princetonacm@acm.org](mailto:princetonacm@acm.org) in advance if you plan to attend the dinner.

