PRINCETON ACM / IEEE-CS CHAPTERS
JANUARY 2017 JOINT MEETING

Reengineering Elections in the USA

How secure are our elections? What could we do to ensure that every vote counts?

It is a well-known and demonstrable fact that a significant percentage of the voting and ballot tabulation systems currently used in US elections are riggable, using only a few inexpensive tools, a little knowledge, and brief access. There is a lot of current debate about whether such tampering has indeed occurred, and if so, who may have been involved. It is challenging to investigate vote tabulation and election security issues, because evolving legislation can also create barriers to research.

This inauguration eve talk will shed light on the next wave of election reengineering, whose lofty promises mask the fact that the remaining vestiges of verification and integrity could all be intentionally concealed from public view and scrutiny. Topics to be discussed will include: National Popular Vote, Ranked Choice Voting, Cryptographic Balloting, Percentage Audits, and the EAC's Voluntary Voting System Guidelines.

Dr. Rebecca Mercuri is a digital forensics expert at Notable Software, Inc., where she performs investigations and provides testimony on a broad variety of legal matters. Shortly after successfully defending her Ph.D. dissertation on the subject of vote tabulation, at the University of Pennsylvania's School of Engineering, Rebecca was requested to submit testimony regarding the 2000 US Presidential election (Bush v Gore). Her pioneering and ongoing efforts, advocacy, and commentary, archived at **www.notablesoftware.com/evote.html**, continue to be an important election technology resource world-wide. Having served on the IEEE's Voting System Standards project, she was recently asked to join a research panel on the Future of Elections being conducted by the National Academies of Sciences, Engineering and Medicine. A senior life member of the ACM and senior member of the IEEE, Dr. Mercuri is also a founder and past chair of the Princeton ACM/IEEE-CS chapter, and past PCJS Section Chair.

Date:	Thursday, January 19, 2017, 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) 285-1066
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@gmail.com** in advance if you plan to attend the dinner.