

COMPUTER SCIENCE
COLLOQUIUM

*Computerized Voting: Will you be able to vote? Will your vote
be properly counted?*

Barbara Simons

Abstract: Almost \$4 billion in federal dollars, provided by the 2002 Help America Vote Act (HAVA), resulted in the initial widespread purchase of paperless computerized voting systems (Direct Recording Electronic or DREs) by many states, including Georgia. Election officials were told that DREs would be cheaper than alternative voting systems, a claim that ignored the costs of testing and secure storage, as well as very expensive annual maintenance contracts. They were told that DREs had been extensively tested and that the certification process guaranteed that the machines were reliable and secure. They were also told that DREs would allow people with disabilities to vote independently. In some cases officials were threatened with lawsuits or actually sued by certain disability rights groups if they expressed hesitation at purchasing DREs.

However, early independent security studies, followed by recent results from California's Top-to-Bottom Review have revealed that the DREs that were tested by California—all of which had been federally qualified and state certified—are poorly designed, badly programmed, insecure, unreliable, and at times very difficult for people with disabilities to use. As a result the California Secretary of State Debra Bowen decertified all of the tested systems. While she recertified them, her conditional recertification orders, which contain long lists of detected problems, have still longer lists of conditions, some quite arduous, that must be met.

HAVA also required each state to create a statewide computerized database of all registered voters. Congressional Democrats and Republicans supported the computerized databases, because they felt the databases would prevent widespread voter disenfranchisement or voting by illegal aliens, respectively. However, if the databases are not secure and properly monitored, it will be possible to strip large numbers of voters' names from the databases or to pad the databases with the names of non-citizens.

We shall discuss some of the voting technologies that will be used in November, as well as national efforts to make our elections more secure and accurate through the use of voter-verified paper ballots. We shall also review the situation in Georgia. Because Georgia still uses paperless Diebold DREs, there will be no way to conduct an audit or recount of the November 2008 election in Georgia.

Information on this speaker can be found here: <http://usacm.acm.org/usacm/Committee/Simons.htm>

Thursday, September 11, 2008, 4:00 pm
Mathematics and Science Center: W201

Refreshments will be provided in the lounge at 3:30pm

MATHEMATICS AND COMPUTER SCIENCE
EMORY UNIVERSITY