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Innovative Secure eVoting System

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Joint project with Ryan Andrews; Mitchell Diebold and Ariel Hernandez, et al.

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Innovative Secure eVoting System

Recent elections have highlighted the need for a more robust and error proof method of counting votes. An increasing number of studies find that the currently available commercial electronic voting machines have multiple security flaws. The lax security and lack of redundancy can, and possibly has, illegally disenfranchised voters by the dropping or mis-recording of votes. This project attempts to build an electronic balloting system that corrects the shortcomings of competing systems. An open and redundant project would solve many of the problems. The eVoting project is based on a client-server network architecture comprised of multiple ballot machines networked to a server machine. System authentication security prevents the unauthorized addition of rogue systems into the network before or during the vote. Vote data are encrypted during transmission from machines to prevent network sniffing. Many current systems have no paper trail; the proposed system features physical vote printouts as a backup in addition to the separate encrypted databases. The proposed system is currently being constructed with the intent of deployment into an actual voting environment.

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