

Poorvi L. Vora

Professor, Department of Computer Science
The George Washington University

Micah Sherr

Provost's Distinguished Associate Professor, Department of Computer Science
Director, Georgetown Institute for Information Assurance
Georgetown University

House Bill 1658
Election Law – Absentee Ballot Requests, Delivery, and Marking
SUPPORT

Ways and Means

February 27, 2018

I am Poorvi L. Vora, a tenured Professor of Computer Science at The George Washington University. Micah Sherr, tenured Provost's Distinguished Associate Professor, Department of Computer Science, Georgetown University, is a co-signatory on my submitted written testimony, and has reviewed and approved the text of my oral testimony, which I present today on our behalf as he is out of town on an academic sabbatical. We have both published extensively on the subject of voting system security. We support this Bill.

It would be grossly negligent for the State of Maryland to continue its current approach after the Mueller indictment of 15 February. The indictment describes a Russian company carrying out all the activities necessary to perpetrate online absentee ballot fraud at significant scale in Maryland. With its current absentee voting process—which includes electronic delivery of absentee ballots to all who request them—the State is among the bottom three states in the US on the issue of absentee ballot security, and hence a very vulnerable target.

I do not say this lightly. Computer scientists have written the State Board of Elections several times on this issue; I myself have testified before it. Earlier this year, Prof. Sherr, I and others wrote to the State Board and several legislators, making the recommendations captured in this Bill.

The availability of accurate personal information in the dark market makes it easy to impersonate voters and request online ballot delivery to fraudulent email accounts. The ballots can then be printed, completed and mailed. These requests and completed ballots would appear legitimate to the State because they would use authentic credentials. It is trivial to hide IP addresses, preventing the identification and tracking of requesting computers and their

locations. Do not believe those who say they will detect such requests, but need to keep their detection techniques secret. They are voicing a misplaced overconfidence.

The risks are not merely abstract. We know of the data breach of credit rating organization Equifax, the interest of Russian bots in Maryland's voter registration data and its online ballot request system and the fact that Russian bots had set up an email account that posed as an absentee ballot account for a US state. The Mueller indictment of 15 February describes how Russian bots and trolls successfully obtained hundreds of email and social media accounts while using VPNs to hide their IP addresses and pretending to be US citizens. They were also able to access social security numbers to open bank accounts in the names of real US citizens. Millions of dollars were spent, and hundreds of employees hired; this effort is believed to be ongoing and is expected to escalate for future elections.

Undetected, absentee voting fraud could change contest outcomes. It would certainly result in chaos on Election Day when voters discover fraudulent absentee ballot requests have been made on their behalf. Much of what we have been warning the State about over the years has happened. If this Bill does not pass, and any of the above events occur, how will the Assembly explain why they ignored repeated warnings from computer scientists?

There is no technical means available to prevent such an attack. This Bill makes an important change that reduces the attack surface, thus limiting the amount of possible damage, and, with that, the incentive to bad actors to go through the effort of carrying it out. It will allow only voters in the armed services and abroad, and those with disabilities who cannot handle paper ballots, to continue to receive and mark their ballots online. Others could still make requests online and receive ballots at brick-and-mortar addresses. This change disenfranchises no voters, and benefits all, because all would suffer were such an attack to occur.

47 other states in the US already have similar, or stronger, restrictions. Particularly after the Mueller indictments, it would be crazy for Maryland to not pass this Bill—akin to climbing the outside of a skyscraper without a rope, because someone told them they wouldn't fall.