The Year in Review

Recapping our 12th year of the Institute’s work to design and develop more secure, lower cost, and easier to use publicly available election technology to increase confidence in elections and their outcomes, in defense of democracy worldwide.
Results for our Stakeholders

Election Security
Developed a new security service for voter registration database management systems using Blockchain-class technology, with a prototype demonstrated to DHS/CISA clearing the way to proceed to pilots in 2020.

Ontario, Canada
Completed prototype for new mobile voter services App, “VoterPal” with an extensible architecture to support planned capabilities including a digital elector ID card.

RockTheVote
Implemented new mobile-optimized user interfaces and tested alternative methods to improve voter registration completion rate for the States with the lowest completion for mobile phone user.

Virginia, USA
Continued enhancement of NIST SP 800-53 security controls compliant Rocky platform with flexible signature capture for motor vehicle record comparison.
Results for the Institute

In 2019 the OSET Institute extended its role as a subject matter expert in election technology infrastructure and related security, including continued work with NBCUniversal and their VoteWatch platform; extensive advisory services for several House and Senate legislative election security initiatives; and produced several policy research and position papers. We continued work with Elections Ontario, Canada in development of their voter services App “VoterPal”; and in collaboration with DXC Technology and Accenture Labs, we built the prototype for the first-ever Blockchain-based voter registration database security service called “Vanadium™.” Notably, we continued to improve the only NIST SP 800-53 security controls compliant open source 3rd party voter registration platform.
To Our Supporters, Stakeholders, and Staff

Looking back at 2019, we see that our strategy of advancing the cause of public election technology infrastructure as matters of national security and defending democracy continues to work.

Two of our leadership team continued to provide consultative services to organizations of the national security community including production of significant work products, in some cases on a confidential basis. Our advisory Board expanded to include Dr. David Bader, the Distinguished Professor and Director of the Institute for Data Science at the New Jersey Institute of Technology. We also added Roger McNamee to the Board advisory, an American businessman, investor, venture capitalist, musician, and notable for his authorship of top selling, “Zucked: Waking Up to the Facebook Catastrophe.”

This year brought continued growth in work with the Media, thereby enabling us to raise the level of conversation about election technology as critical infrastructure and a matter of national security. We invested considerable time in discussion and education of cybersecurity journalists from NBC News, NPR, New Yorker, POLITICO, and other smaller specialty publications. We also continued to develop our NBCUniversal collaboration, which will blossom into world-class coverage of the 2020 election.

In 2019 we expanded our investment in government relations work, which led to the Institute being called upon to advise and comment on several pieces of legislation and potential legislative initiatives on election infrastructure development and security.

Outside of media and government-relations work, focusing on where our heart and soul want to be—design and engineering of election technology for public benefit—we developed and demonstrated to DHS/CISA our prototype of Vanadium. This truly could be a game changing software-as-a-service for protecting legacy voter registration systems. To that extent we continue to nurture our corporate relationship with Amazon Web Services and deeply appreciate their generosity of support.

Candidly, our philanthropic fund raising for our most urgent mission to deliver a finished publicly available voting system qualifying for certification, continues behind schedule. However, the fourth quarter of 2019 brought fresh interest from prospective funding sources. Despite the financial distraction of the upcoming election where more than $2B will be spent on campaigns, we continued to generate support for our work, this year level with last at $250,000. 2020 will be an imperative year for our work, and as such we’re focusing narrowly on producing election security software that can protect voter registrations and voter data.

On the following pages you will find a recap of this year’s activities. We appreciate your continued support of the OSET Institute and TrustTheVote Project, and its imperative mission.

Respectfully,

[Signature]
Gregory A. Miller
Co-Founder & Chief Operating Officer

&

[Signature]
E. John Sebes
Co-Founder & Chief Technology Officer
2019 Highlights — Technology

The heart and soul of the OSET Institute is technology—the software to drive a next generation of more verifiable, accurate, secure, and transparent voting and election administration systems. Our work proceeded, albeit at a slower pace than we need on various aspects of the ElectOS voting system (https://electos.org), primarily with work on producing new technology architecture materials to support volunteer developer education. We continued important work on the security lynch pin called the Device Manager, which involves the concepts of “trusted boot” and “hardware attestation” led by our co-founder and CTO John Sebes.

The TrustTheVote™ Project team continued upgrades to the online voter registration platform called “Rocky” in its on-going technology alliance with RockTheVote. Support for flexible electronic signature was but one of several innovations. The team continued to implement enhancements to sustain its NIST SP 800-53 compliance. Rocky is the first open source election administration technology ever to be NIST SP 800-53 compliant. Work continued on an element of the Rocky platform called “Grommet” – a mobile canvassing service.

The OSET Institute continues to be one of the few organizations engaged in responsible use of Blockchain technology for election administration. Through great teamwork with corporate partners DXC Technology and Accenture Labs we built the prototype of the service called Vanadium™ to provide security and verification services to legacy voter registration database management systems and demonstrated it to DHS/CISA clearing the way to establishing pilots in 2020. See: http://bit.ly/OSETvanaIntro

In 2019 the OSET Institute performed an analysis of the US E.A.C. 2018 EAVS data following on from our 2016 analysis. The results were about the same: this time 7.3 million voter registrations were removed—without reason. Accordingly, VoteReady became a top initiative for the Institute. We prepared prototype software and in Q3-Q4 launched into a intensive campaign to fund raise the required dollars to build and deploy VoteReady for 12-18 states in 2020. VoteReady is a push-notification digital service like what banks offer, to let you know when a suspicious transaction on your account occurs. See: https://bit.ly/OSETvoteready
2019 Highlights — Team

Staff

The Institute acquired more talented contributors in 2019 maintaining a headcount of 60. One of our top gains was Dennis Mema who joined the OSET Institute as an Election Security Policy Analyst and quickly impressed the team with his research and writing skills. He made major contributions to a paper to be released in early 2020. When Dennis is not performing research for the OSET Institute’s policy team, he is preparing to enter law school hopefully in the fall of 2020.

Advisory & Board

This year we officially brought aboard 2 new strategic board advisors: Dr. David Bader who is providing important input to on a range of topics, but primarily technical; and Roger McNamee who is bringing sage advice and thought-leadership on several corporate development matters.

Leadership

Our Leadership, as we use that term, includes those executive-level individuals charged with significant responsibility for the mission of the Institute. The first full year of Eddie Perez from voting systems vendor Hart-Intericvic as our Global Director of Technology Development & Standards has been fantastic with his acumen and experience playing key roles in technology, standards, stakeholder relations, media advisory, and government relations. Similarly, Joy London continued to provide impressive leadership and representation as our Associate General Counsel and Director of International Development. “J-Lo” as she is referred to here made lasting impressions again in Copenhagen this past summer at the Global Democracy Summit. We are humbled by her diplomacy to continue galvanizing global interest in our mission and work.
Alliances & Collaborations

In 2019 the Institute continued to expand its alliances with academia and organizations with common missions to defend democracy and started a unique corporate collaboration program. This builds on our existing relationships such as Amazon Web Services. AWS has been pro-active in developing our 4-year old corporate alliance and that relationship is expanding. As the year closes the Institute is in discussions with several Fortune 500 technology companies about sponsorship and collaboration.

Two global technology firms worked with the Institute on Blockchain technology initiatives such as Vanadium (see Page 5): Accenture and DXC Technology.

OSET Institute leadership is optimistic that corporate collaboration, partnership, and sponsorship can provide another means to enable completion of the ElectOS voting system components by 2022.

International Development

From the beginning, the OSET Institute has recognized its mission must be global—defense of democracy is not limited to the US. Our research and development collaboration with Ontario, Canada formed in 2017, made significant headway this year with their VoterPal App.

Joy London, Associate General Counsel and Director of International Development, attended the second gathering of an invited 250 democracy thought leaders in Copenhagen at the 2nd Annual Global Democracy Summit. The Institute was also invited to the World GovTech Summit in Paris and the World Government Summit in Dubai and hopes to attend both in 2020.

We continue to receive inquiries about our work from abroad. With proper financial support, there is no doubt that our public technology development work can benefit democracies worldwide.
2019 Highlights — Government Relations

Administration

In 2019, the OSET Institute continued to provide ad-hoc confidential consultation with various elements of the national security apparatus. While we cannot detail that work, we can summarily state that thankfully the U.S. government, as well as the States, take seriously the security of the 2020 election and are making all efforts to be prepared.

Congress & States’ Legislatures

Meanwhile, the OSET Institute continued to work with individual members and various committees of Congress in both the House and Senate. Given that the Institute is not (and cannot be) any sort of a lobbying agent, Congress welcomes the OSET Institute as a subject matter expert. 2019 began with a fresh and intense legislative agenda in Congress, which led to a significant amount of work advising on the content of several Bills in both the House and Senate regarding election security. Institute leadership continued its work with several members and committees. That work included assisting with the planning of Hearings and producing several research and position papers. One area of concentration in efforts was the continued debate over ballot marking devices and the ability to produce a verifiable durable paper ballot of record. In addition, considerable time was spent lending our domain expertise in Georgia and North Carolina including support of amicus briefs in litigations to compel greater transparency and verifiability in voting systems.

International

Certainly, a hallmark event was our attendance and participation in the 2nd Global Democracy Summit in Copenhagen. We continue to engage in productive conversations about the state of election technology infrastructure globally, and the continued threats to its integrity and security and what is systemically required to reengineer the technology applying user-centered design principles and security-centric engineering practices based on open data, open source, and open standards as public infrastructure. Finally, we continue to receive invitations to brief EU administrators, and make presentations about our work at various international events.
2019 Highlights — Media

Exposure

2019 was another banner year with an estimated 100+ media “impressions” including several print, radio, and television appearances by members of our leadership team. Although many of these were brief interviews and “sound bites” they enabled us to continue raising awareness with the public about the moral imperative of increasing security, lowering costs, and improving usability of election technology as a matter of national security in defense of democracy. With the 2020 national election coming and our growing NBCUniversal partnership, there is extensive programming and coverage plans in the works, and members of the Institute will likely serve in an analyst capacity for coverage of election administration issues.

Collaborations & Partnerships

2019 continued and progressed an important media partnership, where our subject matter expertise can be used to help educate the public about the issues of trustworthy elections. This occurs through our NBCUniversal collaboration where three of our leadership are available to serve as qualified “Election Technology & Security Analysts” and we will supply a team in support of the 2020 national election cycle.

Meanwhile, as a POLITICO-PRO subscriber, we continue to provide subject matter expertise to their editorial staff covering cybersecurity and election technology. The OSET Institute and POLITICO are in conversation about potential 2020 events to bring together the best and brightest to discuss how to innovate election technology and address a much-needed major nationwide election technology overhaul.