

(ISC)<sup>2</sup>



SECURITY  
CONGRESS

2 0 1 7

[congress.isc2.org](http://congress.isc2.org)  
[#ISC2Congress](https://twitter.com/ISC2Congress)

LEADERS  
OF TOMORROW



2017 (ISC)<sup>2</sup> Security Congress:

# "America Got Pentested – How Facebook, Twitter and Google Were Used To Undermine Democracy"

Raj Goel, CISSP  
raj@brainlink.com  
@rajgoel\_ny

# TRIGGER WARNING!

- » This talk WILL get political!
- » You WILL be offended (and I will skewer sacred cows on both sides)
- » Democracy & Civic Society matters



**RUSSIA**

**TRUMP**

**USA**



# Senior Management - USA



Former CEO

Not my job in a few months...no scandals, no scandals, no scandals!



Current CEO

Grab 'em by the Votes!



Former CEO candidate

Ohh...if it wasn't for those meddling Russians!



Former CISO

CISO – greek for goat you slaughter 1st

# The RED team



Czar, Russia

KGB  
Trillionaire?



Ambassador Kislyak

Social Engineer  
Extraordinaire

# Lock Them Up!!!



At Least 6 White House Advisers Used Private Email Accounts  
nytimes.com

6:54 AM · 26 Sep 17



## Financially Motivated Insiders

Money, Money Money!!!  
It's all about the Benjamins baby!



## Politically Motivated

Disgruntled Insider

## Politically & Financially Motivated

IRS challenged  
\$7BN in possible tax liabilities

# Paid Collaborators (or S&M)



**FACEBOOK**

(you'll be voting for me one day!)



**Brian Sullivan** ✓  
@SullyCNBC

And Twitter co-founder Evan Williams making recent comments about social media 'dumbing down' the country. Interesting turns..

**TWITTER** — We can trend anything...except millions of bots abusing our service.  
**FREE SPEECH FOR BOTS! BOTS UNITED!**

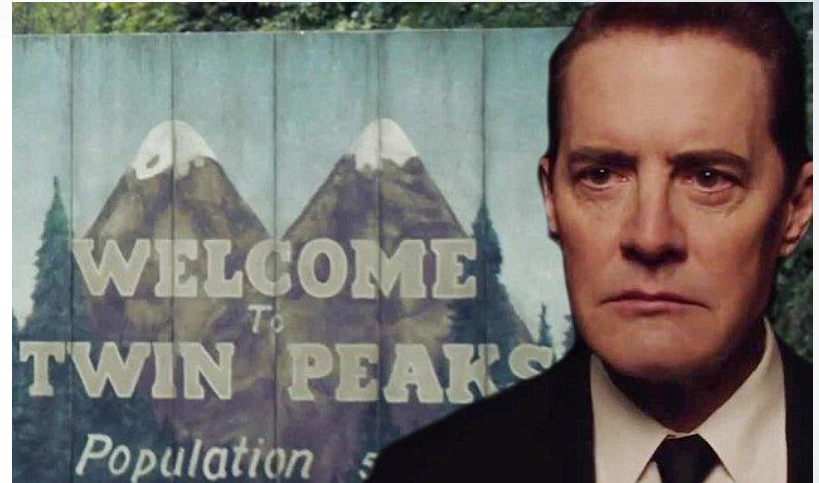


**Jeff Zucker, CNN —**

My APPRENTICE Is the President!  
(beat that Palpatine!!!)



# The Investigator



# External researchers



**Mike Farb**  
@mikefarb1

Researching Our Voting System. Please Support us at [unhackthevote.com](https://unhackthevote.com) so we can continue our work.

📍 What Happened in the Election?

🔗 [unhackthevote.com](https://unhackthevote.com)

Exceptional research  
into vote hacking,  
altered votes, etc.



**John Schindler** ✓  
@20committee

#Natsec @observer, historian, security consultant, author, provocateur, bon vivant, polyglot, counterintelligencer, cat guy. Former NSA, NAVSECGRU, NWC.

📍 UBIQUE

🔗 [20committee.com](https://20committee.com)

He knows his stuff

# The APTs: Real Bad Hombres...

The Koch brothers plan to spend  
\$889 million influencing the 2016 election.

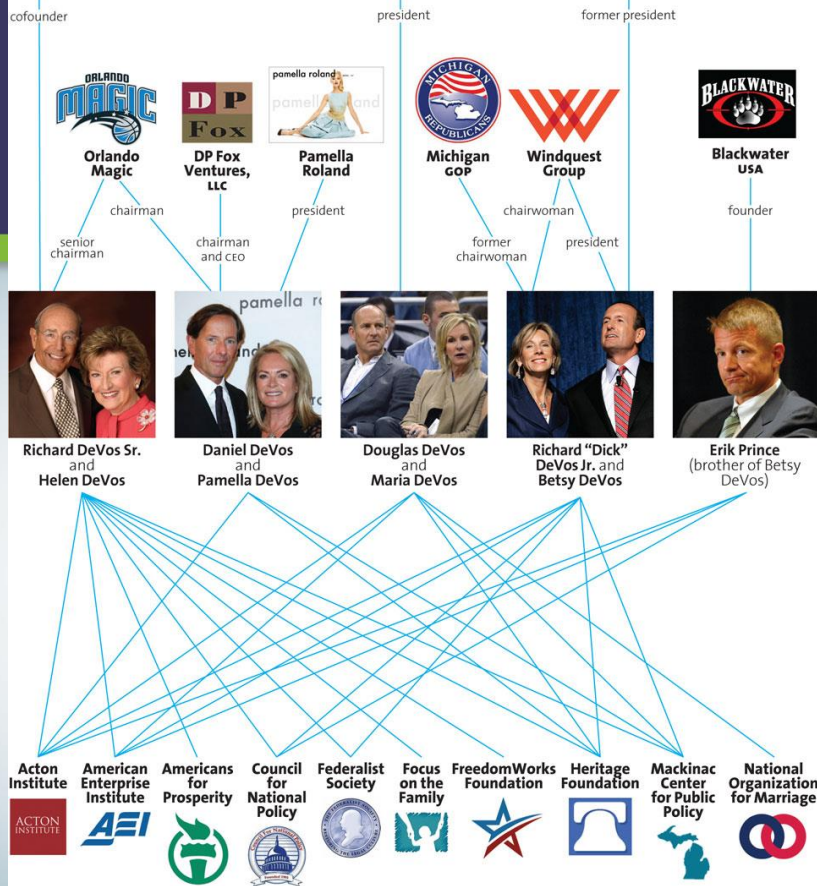


"We favor  
the abolition  
of Medicare  
and Medicaid  
programs."

David Koch's 1980 Libertarian Party Agenda



# Amway



# The APTs: A Family Affair





# Former CEO ignored InfoSec: Obama was warned...

WASHINGTON — The Obama administration received multiple warnings from national security officials between 2014 and 2016 that the Kremlin was ramping up its intelligence operations and building disinformation networks it could use to disrupt the U.S. political system, according to more than half a dozen current and former officials.

As early as 2014, the administration received a report that quoted a well-connected Russian source as saying that the Kremlin was building a disinformation arm that could be used to interfere in Western democracies. The report, according to an official familiar with it, included a quote from the Russian source telling U.S. officials in Moscow, "You have no idea how extensive these networks are in Europe ... and in the U.S., Russia has penetrated media organizations, lobbying firms, political parties, governments and militaries in all of these places."



Kyle Griffin ✓  
@kylegriffin1

The FBI says as many as 39 states had their voting systems scanned or targeted by Russia.



Paper ballots are back in vogue thanks to Russian hacking fears  
[usatoday.com](https://www.usatoday.com)

10:27 AM · 21 Sep 17

# Asleep at the Wheel



**Matt Siegel**  
@mattsiegel

U.S. election integrity ranks \*last\* among Western democracies. To improve this, both voting rights and procedures must be addressed.

**MikeFarb** @mikefarb1

Replying to @mikefarb1

Paper without a Mandatory Procedure for a Hand Recount is no better than Diebold Touchscreens. These Machines are dangerous. Story to follow

12:35 PM · 01 Sep 17



**Dr. Dena Grayson** ✓  
@DrDenaGrayson

🇷🇺 HACKING 🇷🇺

USIC says [#RussianHackers](#) didn't alter vote count, but didn't address the security of VOTER ROLLS!!



Software Glitch or Russian Hackers? Election Problems Draw Little Scrutiny  
[nytimes.com](#)

2:14 PM · 01 Sep 17



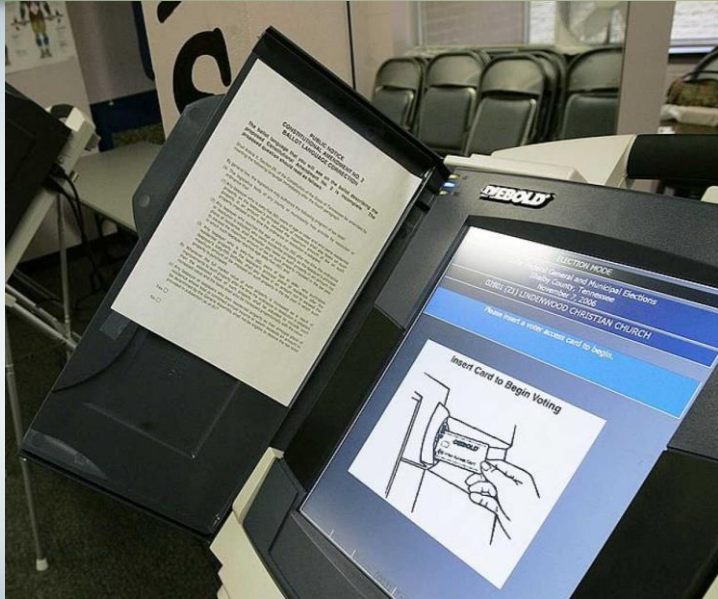
**Caroline O.** @RVAwonk · 5h

Facebook had the tools to fight fake news. Didn't use them b/c they didn't want to upset right-wing voters.



Facebook's Fight Against Fake News Was Undercut by Fear of Con...  
[gizmodo.com](#)

# The Attack Vectors

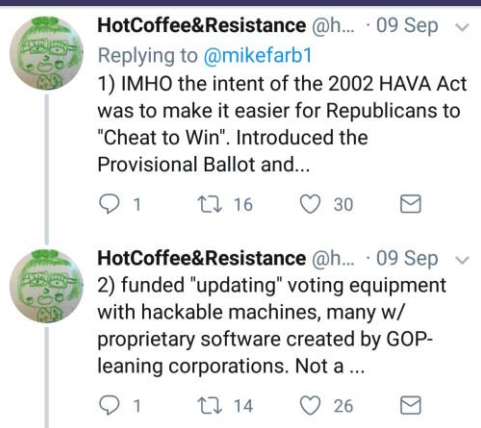


## Diebold Voting Machines

- Introduced after 2000's "hanging chad"
- WindowsXP, Closed Source, over 10 years old
- 2003 – employee leaves 40,000 files on the web
- Remotely controlled, hackable via memory cards
- We spend 1/10<sup>th</sup> on Voting machines than on ATMs
- All machines in 2003 had same encryption key "F2654hD4"
- Not auditable (thanks EULA!)
- Not Patched or supported

BEDROCK OF OUR SOCIETY

# The Attack Vectors

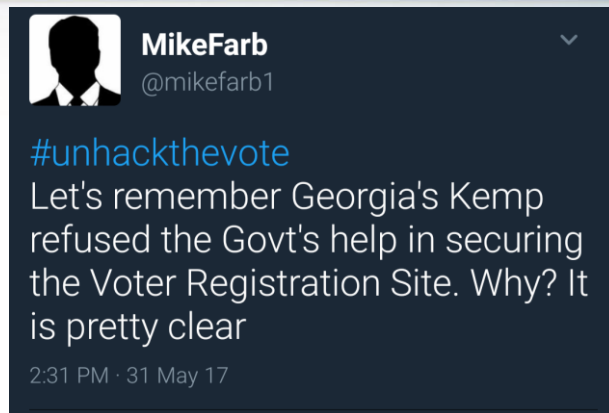
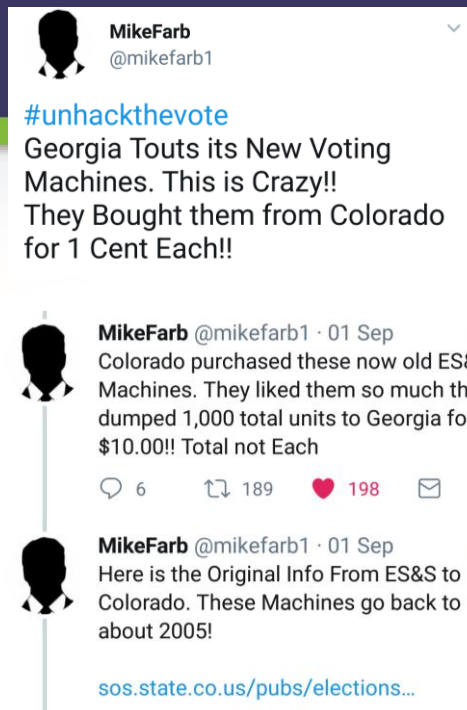


1. In 2010, Dominion also bought Sequoia, so Dominion now accounts for 50% of US vote; ES&S accounts for another 40%.



The BRAD BLOG : EXCLUSIVE:  
On Heels of Diebold/Premier ...  
[bradblog.com](http://bradblog.com)

9:03 AM · 07 Aug 17





# Coincidence?

## GA DEM FOR 145 YEARS BEFORE DIEBOLD

	Governor	State House Majority	State Senate Majority	President
1920	Democrat	Democrat	Democrat	Democrat
1930	Democrat	Democrat	Democrat	Democrat
1940	Democrat	Democrat	Democrat	Democrat
1950	Democrat	Democrat	Democrat	Democrat
1960	Democrat	Democrat	Democrat	Democrat
1970	Democrat	Democrat	Democrat	Democrat
1980	Democrat	Democrat	Democrat	Dem.    Repub.
1990	Democrat	Democrat	Democrat	Republican
2000	Democrat	Democrat	Democrat	Republican
2001	Democrat	Democrat	Democrat	Republican
2002	24,500 Diebold Voting Machines Installed Statewide			
2003	Republican	Democrat	Republican	Republican
2004	Republican	Republican	Republican	Republican

Source: <http://uselectionatlas.org/ISPRESIDENT/compareenranchs.php?fin=13>

87 Broken Optical Scanners in Detroit and the inability to Recount Wayne County Cost Clinton MI!



Half of Detroit votes may be ineligible for recount

[detroitnews.com](http://detroitnews.com)






12:45 PM · 22 Sep 17



A look at how  
Las Vegas slots and  
electronic voting machines compare:

# Slots vs Voting Machines

Guess which one is more secure?

	LAS VEGAS SLOTS	ELECTRONIC VOTING MACHINES
 <b>Software</b>	State of Nevada has access to all software. Illegal to use software that is not on file.	Software is a trade secret.
 <b>Spot-Checking</b>	State gaming inspectors show up unannounced at casinos to compare computer chips with those on file. If there is a discrepancy, the machine is shut down and investigated.	No checks are required. Election officials have no chip to compare with the one found in the machine.
 <b>Background Scrutiny</b>	Manufacturers subjected to background checks. Employees are investigated for criminal records.	Citizens have no way of knowing, for example, whether programmers have been convicted of fraud.
 <b>Equipment Certification</b>	By a public agency at arm's length from manufacturers. Public questions invited.	By for-profit companies chosen and paid by the manufacturers. No public information on how the testing is done.
 <b>Handling Disputes</b>	Casino must contact the Gaming Control Board, which has investigators on call round the clock. They can open up machines to inspect internal mechanisms and records of recent gambling outcomes.	In most cases, a voter's only recourse is to call a number at the board of elections that may or may not work to lodge a complaint that may or may not be investigated.

# Courtroom Testimony on Rigged Voting Machines

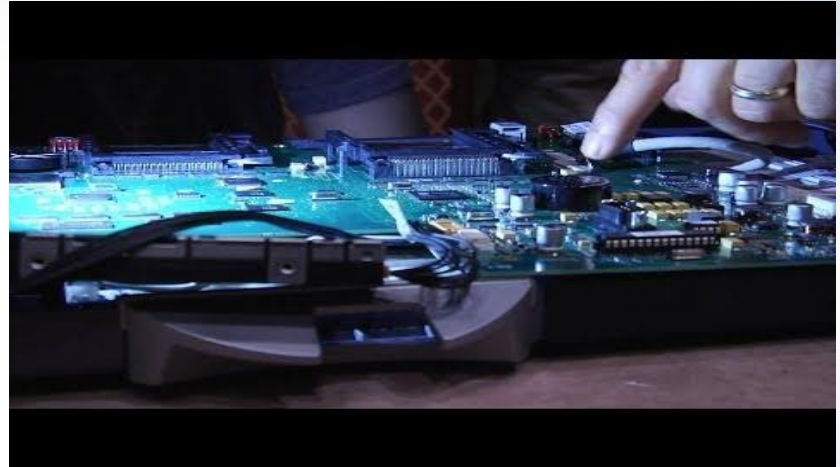


[https://www.youtube.com/watch?v=rVmsaDS\\_FwY](https://www.youtube.com/watch?v=rVmsaDS_FwY)

# Voting Machines Hacked



CLINT CURTIS Courtroom Testimony – Apr 3, 2011  
[https://www.youtube.com/watch?v=rVmsaDS\\_FwY](https://www.youtube.com/watch?v=rVmsaDS_FwY)

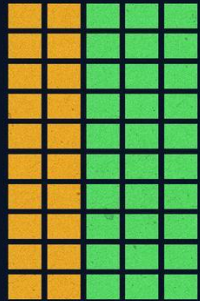


DEFCON25 – July 29, 2017  
<https://www.youtube.com/watch?v=ADyfcz6MUD4>

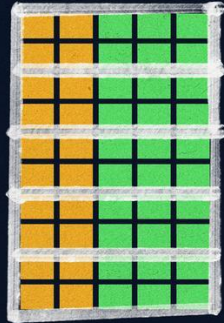


# Gerrymandering – root of all evil

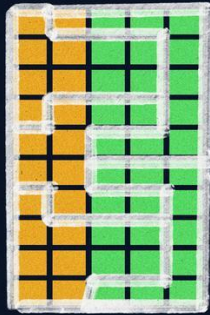
## HOW TO GERRYMANDER 5 DISTRICTS



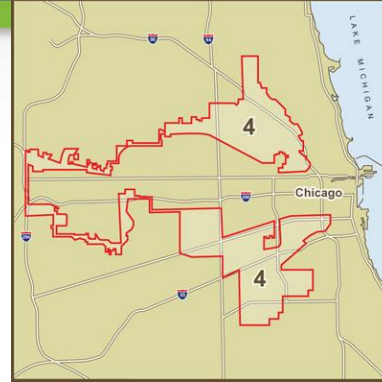
30 GREEN PRECINCTS  
20 ORANGE PRECINCTS  
BUT DON'T MAKE IT 3 VS 2!



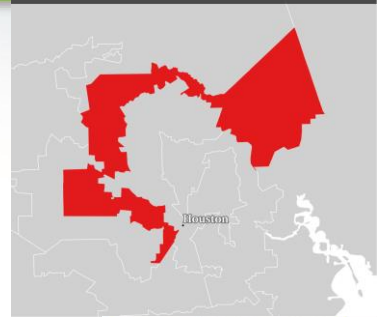
IF YOU ARE GREEN,  
DO THIS AND YOU  
WIN THEM ALL!



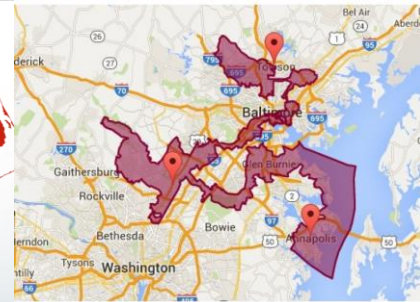
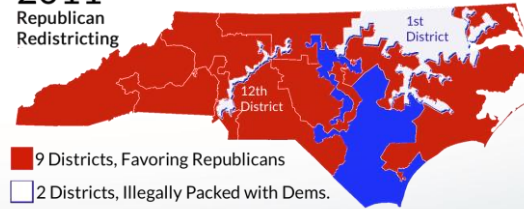
OR IF YOU ARE ORANGE,  
DO THIS AND YOU WIN  
THE MAJORITY!



District: Texas (02)



## 2011 Republican Redistricting



[https://www.vice.com/en\\_us/article/kzanm3/the-texas-gerrymandering-trial-could-change-all-of-america](https://www.vice.com/en_us/article/kzanm3/the-texas-gerrymandering-trial-could-change-all-of-america)

# Show me the \$\$\$

**“There’s an entire political team and a massive office in D.C. that tries to convince political advertisers that Facebook can convince users to vote one way or the other.”**

— Antonio Garcia-Martinez, author of “Chaos Monkeys”



**The New York Times** @nyti... · 14h

Facebook said hundreds of apparently fake Russian accounts bought political ads during U.S. presidential campaign



Fake Russian Facebook Accounts Bought \$100,000 in Political Ads  
[nytimes.com](https://www.nytimes.com)



**Derek Cressman** @DerekCress... · 7h

So, in addition to money laundering, Trump's a Russian oligarch anchor baby kingpin.



Russians Flock to Trump Properties to Give Birth to U.S. Citizens  
[thedailybeast.com](https://www.thedailybeast.com)

# Show me the \$\$\$

^ Russian Billionaire Yuri Milner, investor in Kushner's Cadre, is the 4th largest shareholder in Facebook ☒

#maddow  
thefirstmillionisthehardest.net/  
facebook-ipo-t... pic

Facebook IPO: The Top 10  
Shareholders

BY JANUARY 4, 2017

LEAVE A COMMENT



- 1. Mark Zuckerberg – 28.2% Value: \$29 Billion**  
Zuckerberg, Facebook's CEO and 50% owner as of 2017, is the largest shareholder in the company. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc.
- 2. Jim Rogers/Asset Partners – 10% Value: \$10.4 Billion**  
Jim Rogers is a hedge fund manager and author. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc.
- 3. Dustin Moskowitz – 7.6% Value: \$7.9 Billion**  
Dustin Moskowitz is a venture capitalist and co-founder of the company. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc.
- 4. Digital Sky Technologies – 5.4% Value: \$5.6 Billion**  
Digital Sky Technologies is a Russian company that provides cloud services. It is also the largest shareholder in the company's parent company, Facebook Inc. It is also the largest shareholder in the company's parent company, Facebook Inc. It is also the largest shareholder in the company's parent company, Facebook Inc.
- 5. Eduardo Saverin – 5% Value: \$5.2 Billion**  
Eduardo Saverin is a Brazilian entrepreneur and co-founder of the company. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc. He is also the largest shareholder in the company's parent company, Facebook Inc.

1:23 PM · 09 Sep 17



**Facts Do Matter** @WilDonnelly · 19h  
Russia not only paid for ads on Facebook but used FB Events to organize anti-immigrant & anti-Muslim rallies in US.



Exclusive: Russia Used Facebook Events to Organize Anti-Immigrant ...  
thedailybeast.com



**Sheera Frenkel** ✓  
@sheeraf

When I was reporting on Russian disinformation in E. Europe one thing was consistent: they would find a schism in society & drive a wedge in

**Noah Shachtman** ✓ @NoahShachtman



EXCLUSIVE: Russians used Facebook to organize anti-immigrant rallies on ...

11:42 PM · 11 Sep 17



# Team Treason?



Caroline O.  
@RVAwonk

NEW: Manafort offered to give Russian billionaire Oleg Deripaska 'private briefings' on the 2016 campaign



Manafort offered to give Russian billionaire 'private briefings' on 2016 campaign  
washingtonpost.com

5:30 PM · 20 Sep 17

In a text exchange in early April, Jessica Manafort tells her sister that her father, who maintained an apartment in Trump Tower, where the campaign is located, seemed to be thriving on the campaign.

"Dad and Trump are literally living in the same building and mom says they go up and down all day long hanging and plotting together," Jessica Manafort wrote "Gross," Andrea Manafort responded, prompting Jessica Manafort to come to their father's defense

"Its really amazing opportunity at 67 years old. And he is basically running the campaign now He is so happy," Jessica Manafort wrote.

When WikiLeaks released a massive tranche of hacked emails from the DNC ahead of Clinton's nominating convention in late July, Jessica Manafort seemed to assume that it was her father's doing, texting her sister "Dad is brilliant." Andrea Manafort responded "Well it wasn't dads doing. It was hackers," adding "But dad has to be thrilled about this. It's overshadowing the whole convention."

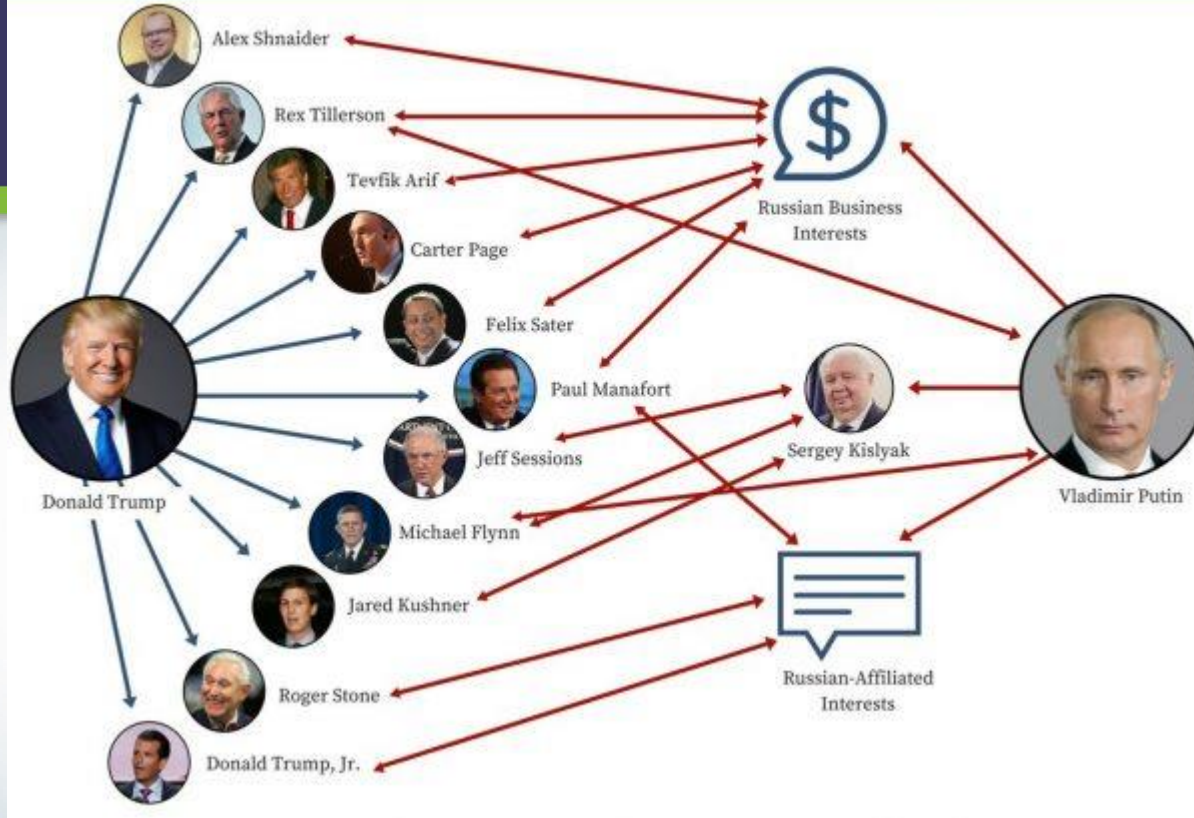
FEC filings showed Manafort's deputy Rick Gates, who effectively worked as Trump's campaign manager for more than two months, also worked for free. Other free laborers include finance chairman Steven Mnuchin, national political director Rick Wiley, and senior adviser Barry Bennett.

Former Chris Christie campaign manager Ken McKay and Manafort lobbying associate Laurance Gay also did not receive paychecks from the Trump campaign. McKay and Gay left the campaign in June and began working for the Trump-backed Super PAC, Rebuilding America Now. The PAC paid each of the former senior-level Trump advisers \$60,000 in June.

Federal campaign finance law bars people working for campaigns or those who have insider knowledge of a campaign from working for a Super PAC for at least 120 days. McKay and Gay both told Reuters they were volunteering for Trump so the law did not apply.



# TRUMP & HIS TEAM'S TIES TO RUSSIA





Thomas Rid ✓

@RidT

New detail on GRU attribution in the great 2016 DNC hack & leak op —note date: May 2016 was before 1st leak, but after registering leak sites

Like many a good spy tale, the story of how the U.S. learned its democracy could be hacked started with loose lips. In May 2016, a Russian military intelligence officer bragged to a colleague that his organization, known as the GRU, was getting ready to pay Clinton back for what President Vladimir Putin believed was an influence operation she had run against him five years earlier as Secretary of State. The GRU, he said, was going to cause chaos in

# Russia's "Active Measures" - Blending Overt To The Covert On Social Media

Propaganda Themes:

Political

Financial

Social

Calamity

**Attribution:**  
**"White" = Overt**



COPIES THEMES

**Overt Russian State News Outlets**  
*Russia Television (RT), Sputnik News*

- Manipulate True Information
- Push Misinformation



GUIDE THEMES

**Attribution:**  
**"Gray" = Uncertain**



**Overt News Aggregators**

- Build Social Media Following
- Amplify Narratives In Target Audience



SUPPLY SECRETS

**Attribution:**  
**"Black" = Covert**



**Hecklers**

- Discredit Democracy, Public & Gov Figures
- Sow Mistrust
- Advance Narratives

SHAPE NARRATIVES

**Honeypots**

- Compromise Accounts



**Hackers**

- Defacement
- Data Extraction
- Denial of Service



**Fancy Bear**  
APT 28 - GRU

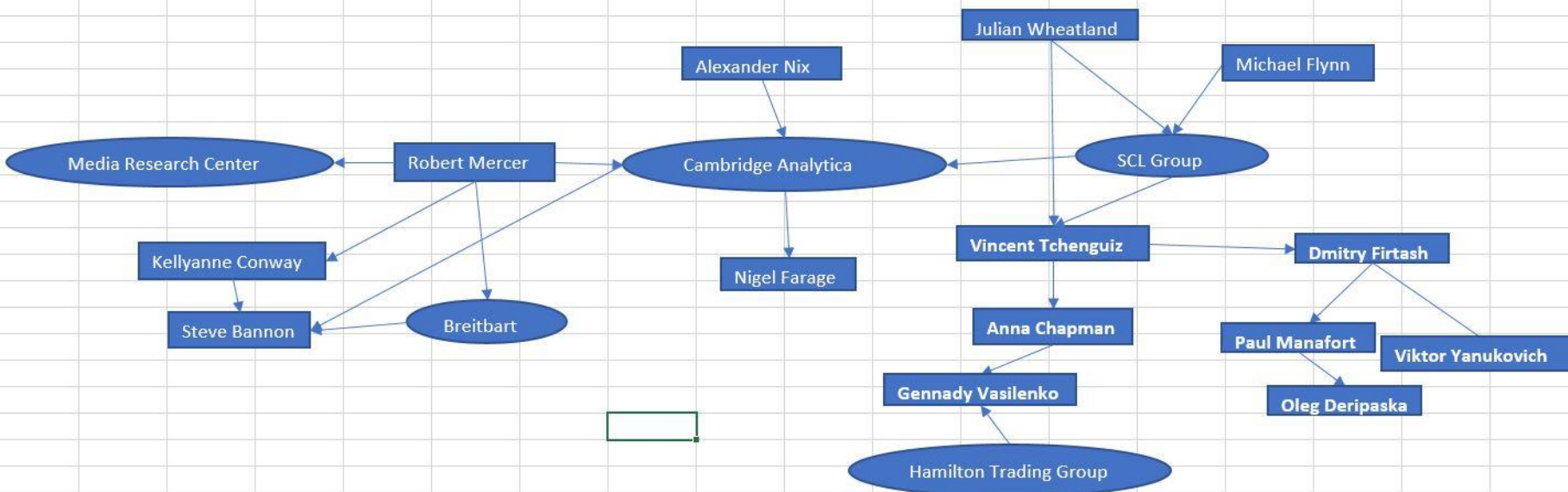
**Cozy Bear**  
APT 29 - FSB



Source: A. Weisburd (CCHS) C. Watts (FPRI & CCHS) J. Berger (ICCT)

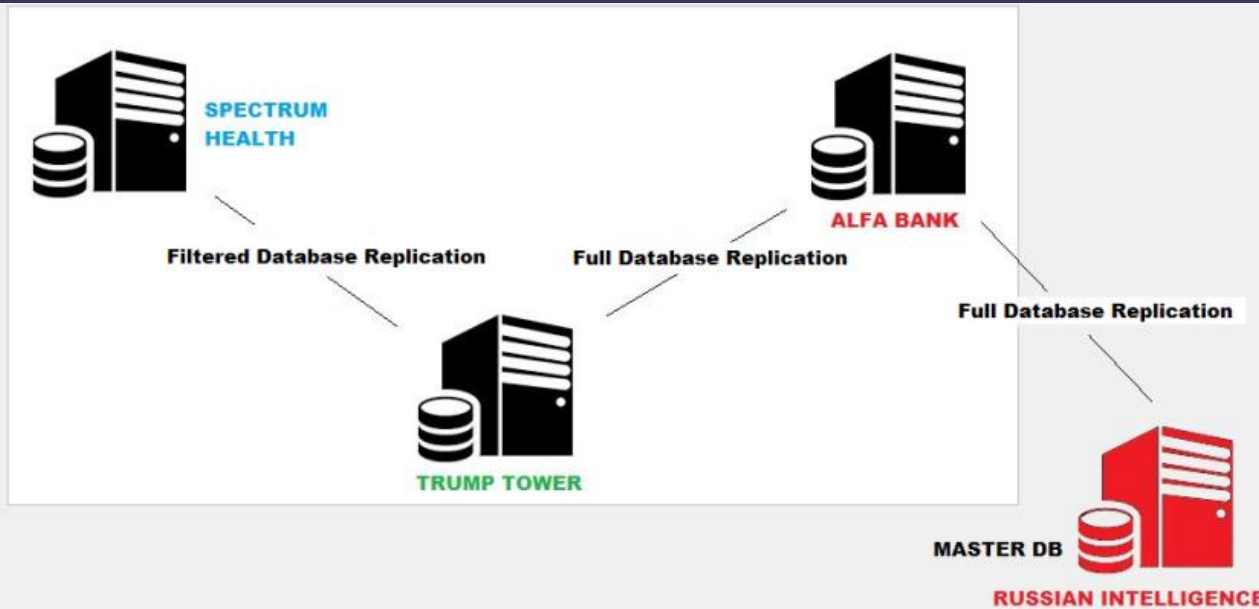


# Trumpian Trail of Data...





# Dick & Jared playing in the Tower...



Spectrum – owned by Dick Devos

RU used that data for FB dark ads?

Voter roll manipulation?

<https://teapainusa.wordpress.com/2017/04/03/data-patterns-suggest-trump-towerspectrum-health-ran-a-stealth-data-machine-with-russia/>



**Jayne Miller** ✓  
@jemillerwbal

Annapolis firm targeted by FBI touted for pioneering the use of technology in political campaigns. Represents GOP candidates nationwide

1:56 PM · 11 May 17

2,840 RETWEETS 3,014 LIKES



**wendyrogovin** @wruser · 1h

Replying to @jemillerwbal and @TeaPainUSA  
Strategic Campaign Group –  
[strategiccampaigngroup.com](http://strategiccampaigngroup.com) Kelley  
Rogers, P, Chip O'Neill, vp, Dennis  
Whitfield sr. advisor



# Data Trail...

rnc voter database leaked



**Web** Images Videos News

All Regions ▾ Safe Search: Strict ▾ Any Time ▾

## Data of almost 200 million voters leaked online by GOP ...

Jun 19, 2017 - Personal information of almost 200 million registered U.S. voters was accidentally exposed online due to an improperly configured security setting ...

[money.cnn.com/2017/06/19/technology/voter-data-leaked-o...](http://money.cnn.com/2017/06/19/technology/voter-data-leaked-o...)

## GOP database of nearly every voter was ... - Washington Post

Jun 19, 2017 - The Republican National Committee's database of nearly every registered American voter was left vulnerable to theft on a public server for 12 days this month ...

<https://www.washingtonpost.com/news/the-switch/wp/2017/06/19/republican-...>

AZUMA 2017 THE STATE





As they scrambled to contain the damage from the hack and regain control of any compromised devices, the spy hunters realized they faced a new kind of threat. In 2016, Russia had used thousands of covert human agents and robot computer programs to spread disinformation referencing the stolen campaign emails of Hillary Clinton, amplifying their effect. Now counterintelligence officials wondered: What chaos could Moscow unleash with thousands of Twitter handles that spoke in real time with the authority of the armed forces of the United States? At any given moment, perhaps during a natural disaster or a terrorist attack, Pentagon Twitter accounts might send out false information. As each tweet corroborated another, and covert Russian agents amplified the messages even further afield, the result could be



taking shape. Marrying a hundred years of expertise in influence operations to the new world of social media, Russia may finally have gained the ability it long sought but never fully achieved in the Cold War: to alter the course of events in the U.S. by manipulating public opinion. The vast openness and anonymity of social media has cleared a dangerous new route for antidemocratic forces. "Using these technologies, it is possible to undermine democratic government, and it's becoming easier every day," says Rand Waltzman of the Rand Corp., who ran a major Pentagon research program to understand the propaganda threats posed by social media technology.

Current and former officials at the FBI, at the CIA and in Congress now believe



In one case last year, senior intelligence officials tell TIME, a Russian soldier based in Ukraine successfully infiltrated a U.S. social media group by pretending to be a 42-year-old American housewife and weighing in on political debates with specially tailored messages. In another case, officials say, Russia created a fake Facebook account to spread stories on political issues like refugee resettlement to targeted reporters they believed were susceptible to influence.

As Russia expands its cyberpropaganda efforts, the U.S. and its allies are only just beginning to figure out how to fight back. One problem: the fear of Russian influence operations can be more damaging than the operations themselves. Eager to appear more powerful than they are, the Russians





100% 09:08



TIME

SUBSCRIBE

MORE

Russia plays in every social media space. The intelligence officials have found that Moscow's agents bought ads on Facebook to target specific populations with propaganda. "They buy the ads, where it says sponsored by—they do that just as much as anybody else does," says the senior intelligence official. (A Facebook official says the company has no evidence of that occurring.) The ranking Democrat on the Senate Intelligence Committee, Mark Warner of Virginia, has said he is looking into why, for example, four of the top five Google search results the day the U.S. released a report on the 2016 operation were links to Russia's TV propaganda arm, RT. (Google says it saw no meddling in this case.)

Researchers at the University of Southern California, meanwhile, found



LEADERS OF TOMORROW

[congress.isc2.org](http://congress.isc2.org) • #ISC2Congress

# UNSocial Media

Sen. Mark Warner: "Hard to believe [#Facebook](#) only closed 470 fake Russian troll accounts in the U.S. — but closed 50,000 of them in France."

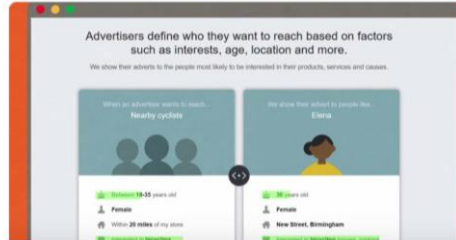


9:35 PM · 13 Sep 17



**Mathias Klang** @Klangable · 11m

For \$25, you can target Facebook users based on race and sexual orientation



For \$25, you can target Facebook users based on race and sexual orientation...  
[boingboing.net](#)



**Sylvia** @iamyuneek · 2h

Trump spent 85 million, so FB sent people to HELP Cambridge Analytica target voters, and gave them white glove treatment.

5

36

48



You Retweeted



**Jessica Josephson**

@jjj5819

Replying to @iamyuneek @RickPetree and 5 others

YES!! And dozens also came from Twitter and Google working with Cambridge Analytica. They were there for the entire campaign!!!

11:51 AM · 14 Sep 17

# The Real FSBbook



Julia Angwin  
@JuliaAngw

Wanna buy ads  
Jew-haters? Un  
about it, Facebo  
them.



Facebook Enabled A  
Haters' — ProPublica  
propublica.org

4:17 PM · 14 Sep 17



The Hill  
@thehill

JUST IN: Facebook allowed  
advertisers to target categories  
like "Jew haters": report [hill.cm/MD6ifJu](http://hill.cm/MD6ifJu)



5:31 PM · 14 Sep 17

This point here is key: Facebook's policy allows dark ads to appear so rapidly & briefly that we may never even know the full scope of it.

This should not surprise us. Anyone can deploy Facebook ads. They are affordable and easy. That's one reason that Facebook has grown so quickly, taking in \$27.6 billion in revenue in 2016, virtually all of it from advertisers, by serving up the attention of two billion Facebook users across the globe.

The service is popular among advertisers for its efficiency, effectiveness and responsiveness. Facebook gives rich and instant feedback to advertisers, allowing them to quickly tailor ads to improve outcomes or customize messages even more. There is nothing mysterious or untoward about the system itself, as long as it's being used for commerce instead of politics. What's alarming is that Facebook executives don't seem to grasp, or appreciate, the difference.

A core principle in political advertising is transparency — political ads are supposed to be easily visible to everyone, and everyone is supposed to understand that they are political ads, and where they come from. And it's expensive to run even one version of an ad in traditional outlets, let alone a dozen different versions. Moreover, in the case of federal campaigns in the United States, the 2002 McCain-Feingold campaign-finance act requires candidates to state they approve of an ad and thus take responsibility for its content.

None of that transparency matters to Facebook. Ads on the site meant for, say, 20- to 30-year-old home-owning Latino men in Northern Virginia would not be viewed by anyone else, and would run only briefly before vanishing. The potential for abuse is vast. An ad could falsely accuse a candidate of the worst malfeasance a day before Election Day, and the victim would have no way of even knowing it happened. Ads could stoke ethnic hatred and no one could prepare or respond before serious harm occurs.

8:16 PM · 09 Sep 17



Xeni Jardin  
@xeni

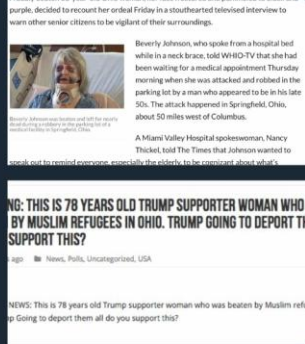
Used to be when politics got insanely dirty, you'd say only the lawyers would be sure to win. Now, it's Facebook.

11:48 PM · 17 Jan 17

# F\*ck Democracy – FB's real motto



Images of latest hit on Facebook from the site I wrote about: [buzzfeed.com/craigsilverman...](https://buzzfeed.com/craigsilverman...) Stolen thumbnail, fake headline, no article text = \$



This is true. I kept a running convo with a couple undecided voters over the last 4 weeks. They all believed the wild conspiracy theories

Alec MacGillis @AlecMacGillis

Can't overstate how many of the swing-state voters I spoke with who had the wildest anti-Hillary notions relied on Facebook for their news. [twitter.com/kylegriffin1/s...](https://twitter.com/kylegriffin1/s...)

4:41 PM · 07 Sep 17



Abt 1/5 of all political discussion on social media in the 2016 election was driven by bots, but it was perceived as grassroots/organic.  
4/

Social bots distort the 2016 U.S. Presidential election online discussion

Alessandro Bessi, Emilio Ferrara

Abstract

Social media have been extensively praised for increasing democratic discussion on social issues related to policy and politics. However, what happens when this powerful communication tools are exploited to manipulate online discussion, to change the public perception of political entities, or even to try affecting the outcome of political elections? In this study we investigated how the presence of social media bots, algorithmically driven entities that on the surface appear as legitimate users, affect political discussion around the 2016 U.S. Presidential election. By leveraging state-of-the-art social bot detection algorithms, we uncovered a large fraction of user population that may not be human, accounting for a significant portion of generated content (about one-fifth of the entire conversation). We inferred political partisanship from hashtag adoption, for both humans and bots, and studied spatio-temporal communication, political support dynamics, and influence mechanisms by discovering the level of network embeddedness of the bots. Our findings suggest that the presence of social media bots can indeed negatively affect democratic political discussion rather than improving it, which in turn can potentially alter public opinion and endanger the integrity of the Presidential election.

5:18 PM · 14 Apr 17

LEADERS OF TOMORROW

congress.isc2.org • #ISC2Congress



# Spammin' in the USA



Sources: Boris Epshteyn Paid Russian Hackers  
For Both Team Trump and FSB  
patribotics.blog

- Pyotr Levashov, aka Peter Severa - spam kingpin
- lifestyle would have embarrassed an oligarch.”
- Levashov’s wife told Russia Today that her husband’s arrest was due to his involvement in a **“computer virus” that was “linked to Trump’s win.”**
- 2012 – Microsoft filed lawsuit; Kelihos used to spread fake news about Putin opponent Mikhail Prokhorov

[https://www.buzzfeed.com/sheerafrenkel/this-is-the-russian-hacker-detained-in-spain-for-helping?utm\\_term=.ldPlymQxO#.vk4gQP8OA](https://www.buzzfeed.com/sheerafrenkel/this-is-the-russian-hacker-detained-in-spain-for-helping?utm_term=.ldPlymQxO#.vk4gQP8OA)

# Date Night!

**Michael Best** @NatSecGeek  
Russian Federation = RuFe.  
  
America has been RuFe'd.

..



The Register



## How the Facebook money funnel is shaping British elections

TV ads banned, but targeted Facebook videos get a free rein

By SA Mathieson, 30 May 2017

Britons vote for a new government on June 8 and, until recently, election campaigns have been tightly controlled affairs with limits on how much parties can spend per constituency, the requirement to submit detailed accounts and no political advertising on television.

But the rules don't cover online advertising – allowing Facebook to cash in, having used the Conservative Party's 2015 victory as a [case study](#). The Electoral Commission, which exists to regulate elections, estimates that in the 2015 general election more than 99 per cent of spending on social media was with Facebook, with the Conservatives splashing out £1.21m, Labour £160,000, Ukip £91,000, the Liberal Democrats £22,245, the Green party £20,000 and the Scottish National party £5,466.



Sheera Frenkel  
@sheeraf

When I was reporting on Russian disinformation in E. Europe one thing was consistent: they would find a schism in society & drive a wedge in

Noah Shachtman @NoahShachtman



EXCLUSIVE: Russians used Facebook to organize anti-immigrant rallies on ...

11:42 PM · 11 Sep 17



RynheartTheReluctant  
@TheRynheart

Cambridge Analytica worked in Kenya to get Kenyatta elected. Supreme court just overturned b/c election hacking.



Kenya's Supreme Court declares presidential election result null, orders do-over  
[usatoday.com](#)



MikeFarb  
@mikefarb1

[#unhackthevote](#)

Florida Speaker of the House accused of Paying for Vote Rigging Software!! Clint Curtis Testifies.

Chip Cooper @cooperchip1

Tom Feeney was Speaker of FLA House in 2000 when he paid for development of "vote rigging" software that could control final vote counts.  
[twitter.com/drdenagrayson/...](#)

10:56 AM · 07 May 17

# Weaponizing Emails





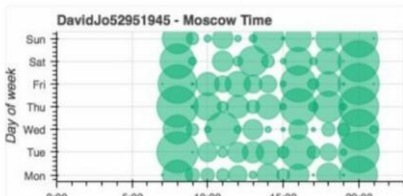
# 2 Legit To Quit

**Conspirador Norteño** @conspir... · 1d ✓  
136K tweets from DavidJo52951945 over four years on a variety of topics, all aligned with the interests of the Kremlin at the time.

6 290 742

**Conspirador Norteño** @conspir... · 1d ✓  
(And speaking of time, I'll again point out the schedule. 12 hour days, 8 AM - 8 PM Moscow time every single day. . .)

DavidJo52951945 - Moscow Time



**Alexey Kovalev** ✓  
@Alexey\_Kovalev

That St Petersburg troll factory identified as source of paid elex ads — they've been busy rebranding themselves



Russia's Infamous 'Troll Factory' Is Now Posing as a Media Empire  
themoscowtimes.com

4:23 PM · 06 Sep 17

## Trump Is Using Targeted Facebook Ads To Reassure Supporters He Will Build The Border Wall

The personal Facebook pages of the president and vice president are running dark post ads that promise "A WALL (NOT A FENCE)," while asking for donations.

Posted on Sep 20, 2017, 1:10:26 PM GMT



**Craig Silverman**

BuzzFeed News Media Editor



Facebook

# If It Ain't Broke

President Donald Trump is using targeted Facebook ads to reassure supporters that he still plans to build the border wall after his recent public comments caused many to question whether he would keep his promise.

"There's been a lot of noise and a lot of rumors," reads the text of a Facebook ad from Trump's [personal Facebook page](#) that was targeted to specific users in recent days. "...WE WILL BUILD A WALL (NOT A FENCE) ALONG THE SOUTHERN BORDER OF THE UNITED STATES..." The ad concludes with a pitch for donations.

# You can't make this stuff up...

Bob & Todd Urosevich, two brothers have monopolized American election technology for decades through Diebold (Ohio) & ES&S (Nebraska)

2001, Philip Foster (Sequoia, later sold to Dominion) indicted for conspiring to launder money.

- kickback scheme to Louisiana elections official, who purchased Sequoia equipment with millions in overcharges
- Foster, got immunity for testimony against the elections official, avoided jail time
- Was later promoted to VP of sales administration and strategies at Sequoia.

Jeffrey Dean's vote-by-mail software - developed while Dean was in jail, dominates the U.S. absentee-voting market.

- Dean launched his own ballot-printing company with narcotics trafficker John Elder.
- They later sold it to Global Election Systems, (owned by Bob Urosevich), before it was sold to Diebold.

Felons can't vote – but they can & do manage our election industry.

<https://harpers.org/archive/2012/11/how-to-rig-an-election/5/>

# Cyberwar is real...



**Charlie Stross** ✓  
@cstross

Key point: UK/USA think cyberwar is hacking. Russia, China, etc. think cyberwar is social media propaganda attacks: [ccdcoe.org/publications/2...](http://ccdcoe.org/publications/2...)



**Charlie Stross** ✓ @cstross · 12h  
Replying to @cstross

Can't emphasize this point enough: the cheapest way to wage 21st century war is to convince your enemies to shoot themselves in the foot.

↩ 2   ↻ 74   ❤ 81   ✉



**Steve Silberman** ✓  
@stevesilberman

Important. Instead of hacking computers, the Russians now have a more powerful weapon: hacking public opinion. [time.com/4783932/inside...](http://time.com/4783932/inside...)

For many Americans, Russian hacking remains a story about the 2016 election. But there is another story taking shape. Marrying a hundred years of expertise in influence operations to the new world of social media, Russia may finally have gained the ability it long sought but never fully achieved in the Cold War: to alter the course of events in the U.S. by manipulating public opinion. The vast openness and anonymity of social media has cleared a dangerous new route for antidemocratic forces. 'Using these technologies, it is possible to undermine democratic government, and it's becoming easier every day,' says Rand Waltzman of the Rand Corp., who ran a major Pentagon research program to understand the propaganda threats posed by social media technology.

7:44 PM · 18 May 17 from San Francisco, CA



**Wendy C. Ortiz**  
@WendyCOrtiz

"The long-run objective is to have democracy break down." Russia's High Tech Tool Box for Subverting US Democracy



Russia's High Tech Tool Box for Subverting US Democracy, A (Semi-Complete) Guide  
[wired.com](http://wired.com)



# The Future

"There will never be an election again in which trolling, hacking and extreme far-right politics do not play a role," Andrew Auernheimer, a hacker and blogger for the U.S. neo-Nazi Daily Stormer website wrote after Donald Trump's election victory last year.

..

# Nobody thinks they're the target...



**Dr. Eric Cole**  
@drericcole

If you do not think you are a target,  
the adversary loves you because  
your defenses are down and you  
are easy prey for them to attack....

8:00 AM · 01 Sep 17

DNC – poor InfoSec

RNC – poor InfoSec

Hillary – poor Infosec & Optics

USA – REALLY POOR INFOSEC

# Morgan Freeman At War



[https://www.youtube.com/watch?v=V2av\\_\\_s-598](https://www.youtube.com/watch?v=V2av__s-598)

# BIG TECH is the Enemy



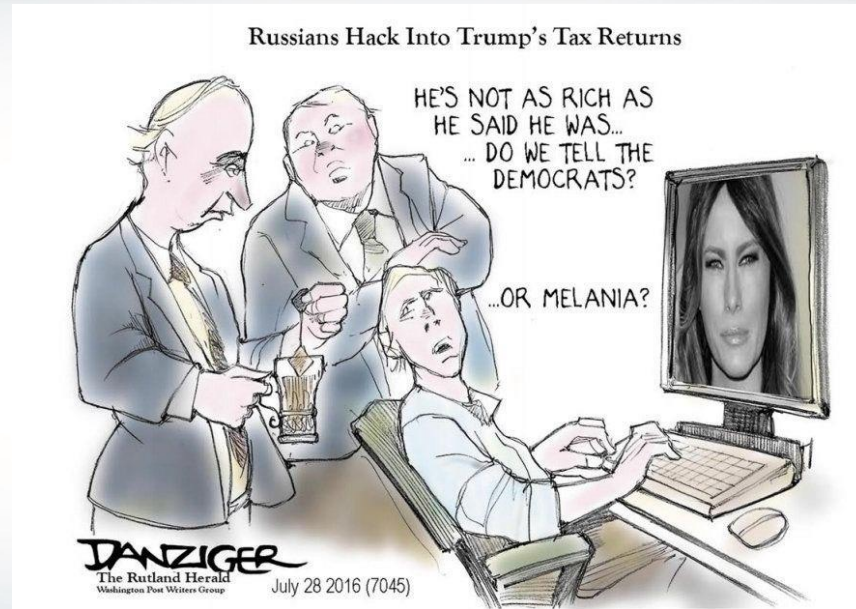
Demand  
SAFE  
SOFTWARE  
Laws!!!

1. BIG TOBACCO gave us public health crisis
2. BIG AUTO gave us exploding Pintos
3. BIG TECH gave us:
  - IBM: Concentration Camp tattoos
  - MICROSOFT: supply chain vector for ransomware & malware
  - CISCO & BLUECOAT: Great firewall of China; speech suppression
  - BIG TECH is at the heart of every data breach & privacy violation
  - Google, Facebook, Twitter are complicit in election hacking worldwide
  - **NO LIABILITY == license to act with impunity**

**DON'T BE EVIL – Big Tech hates competition**



# A perfect outcome...



# Remember the Past

1. PROHIBITION – War on Immigrants
2. WAR ON DRUGS – War on the poor
3. CYBERWAR – War on OUR KIDS – war on the American Middle Class

The Nixon campaign in 1968, and the Nixon White House after that, had two enemies: the antiwar left and black people. You understand what I'm saying? We knew we couldn't make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course we did.

# Suggestions / Wishlist

1. Get involved in CIVIC Society
2. Put an end to GERRYMANDERING
3. Run for Office (yes, REALLY!)
4. Demand Voting Rights for ALL
5. Demand Voting machines have real audit trails
6. Buy your own politicians
7. Software SAFETY & Software Liability laws
8. Make Election Day a federal holiday!!!

# Raj Goel, CISSP

Chief Technology Officer

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@rajgoel\_ny

Books:

## **UNPLUGGED Luddites Guide To Cybersecurity**

<http://www.amazon.com/UNPLUGGED-Luddites-Guide-CyberSecurity-Grandparents/dp/0984424830/>

## **The Most Important Secrets To Getting Great Results From IT**

<http://www.amazon.com/gp/product/0984424814>

