

Portfolio

A live version of this portfolio is available [here](#).

About

Miles McCain is a student at Phillips Academy Andover. He is an advocate for privacy and government transparency, the founder of [Politiwatch](#), and the author of [WorthHiding.com](#).

I want to use technology to improve the world—and to learn something along the way. My research areas include digital privacy, foreign policy, government accountability, and the intersection thereof.

My projects, research, and commentary have appeared in several major news outlets including the *Washington Post*, *NBC News*, *CNN*, *the Daily Beast*, *Nightly News with Lester Holt*, *TimeOut National*, *BoingBoing*, *Bustle*, and *TimeOut New York*.

In this document: [Media Coverage and Publications](#), [Research](#), [Organizations](#), [Projects](#), [Professional Experience](#)

Media Coverage and Publications

Academic publications are listed under [research](#).

My projects and writings have appeared in several major news outlets including the *Washington Post*, *NBC News*, the *Daily Beast*, *Nightly News with Lester Holt*, *TimeOut National*, *BoingBoing*, *Bustle*, and *TimeOut New York*.

Authored pieces:

- ...in [WorthHiding](#) — a personal site for publishing pieces related to computer science, political science, politics at large, privacy, and government transparency. More than 40 pieces (and 75k words) published. (See also: [references and publications in media](#).)

- ...in the [Washington Post](#): "Congress keeps quiet on U.S. drone policy — and that's a big problem" — an article I (co)wrote. Though listed also under `Research`, it belongs here as well.

This section does not include media written about me or about things I have made. It only includes written publications that I have authored. For information on coverage, see [here](#) or later in this document.

Research

Most of the research that I do is related to either computer science, political science, or both.

Major Research Projects

- **Absence of Accountability: A Machine-Assisted Analysis of Legislative Engagement on US Foreign Policy:** using computers to parse the entire congressional record and study the determinants of foreign policy oversight in Congress. Co-authored with [Dr. Sarah Kreps](#).
 - Source code [open source](#).
 - Presented at Yale, Columbia, Cornell, and UC Santa Barbara.
 - *Washington Post* popular opinion piece [here](#).
 - Submitted at the [American Political Science Review](#) (currently under review).

Minor Research Projects

- **[How Members of Congress Talk About the National Security Agency](#):** a data-driven analysis of how members of Congress talk about the NSA.
- **[A Quantitative Measure of Partisan Periphery](#):** creating a mathematical (i.e. not subjective) measure of partisan periphery

Academics

Phillips Academy Andover — class of 2019 (junior)

Current Classes

English, Math, Russian, U.S. History, Chemistry, Computer Science (seminar)

Awards

- Webster Prize (*for excellence in the social sciences*),
- David G. Wood Fellowship (*for excellence in writing*),
- Physics 400 Prize

Athletics

- Varsity Rowing (current)
- Wrestling (former)

Leadership Positions

- [Blueshells](#) (*founder*)
- [Techmasters](#) (*co-president*)
- Robotics Club (*co-president*)
- GSA (*gender & sexuality alliance; board member*)
- UNICEF Club (*board member*)
- Proctor (*Flagg House*)
- Dorm representative

Other Campus Group Affiliations

- Computer Science Club
- “MAKERS” Club
- WPAA (*campus radio station*)
- Democrats Club

Organizations

Politiwatch: Using technology to promote political accountability, digital rights, and social awareness. (501c3 nonprofit.)

- I founded Politiwatch after I began to receive legal and death threats for various projects I created. (See projects below.) It has protected me against legal action, allowed me to build a brand for my sites, and eased the process of receiving tax-deductible financial donations.
- Politiwatch is an American 501(c)(3) nonpartisan, nonprofit organization that advocates for

freedom of information, digital privacy rights, and political accountability. It was founded in 2016 with the goal of combating political ignorance, promoting privacy, and making civic information more accessible.

- Sponsors include Google, ProtonMail, and DigitalOcean.

PACTF: a global cybersecurity competition with over 1,000 teams and \$20,000 in prizes.

- After being a participant in PACTF 2016, in 2017 I became the project lead (with [Alex Reichenbach](#)).
- Managed sponsors, problem sets, advertising, and digital infrastructure (effectively the entire competition, though I couldn't have done it without help from the project mentors and the rest of the [team](#)).
- Sponsors include Amazon, J.P. Morgan, DigitalOcean, ProtonMail, Cloudflare, Carnegie Mellon University CyLab (Security and Privacy Institute), Carnegie Mellon University Information Networking Institute, and Phillips Academy Andover.

Projects

Various projects that I have created, listed in no particular order. Collectively, my projects have been used more than two million times.

- [TheCollectiveUnconscious.org](#) — an online art installation highlighting the time-suck that the internet can be
- [Encompassed.press](#) — the single most encompassing and important news story, found automatically. Accessible at <https://encompassed.rmr.io/>.
- [BibleOrQuran.org](#) - a game to combat islamophobia.
 - Among the most popular games on Reddit's [WebGames](#) subreddit.
 - Awarded "most wholesome [game] of 2016" by Reddit WebGames
- [MD-C Labs](#) — a place for experimental web projects. Not production-ready.
- [PolitiTweet](#) - archiving the tweets (and publishing the deleted ones) of major public figures.
 - Blocked by Charlie Sheen (whoops)
 - Threatened and hated by alt-right. (Report [here](#).)
 - Cited by various major news publications including...
 - [Nightly News with Lester Holt](#): "Wide Range of Celebrities Accidentally Tweeted Russian Propaganda During 2016 Election" — Famous Twitter users with big followers, from Ivanka Trump to comedians Trevor Noah and Sarah Silverman, inadvertently shared tweets that came from accounts linked to Russia, according to social media tracker PolitiTweet.
 - [NBC News](#): "Russian Trolls Duped Global Media And Nearly 40 Celebrities" —

Celebrities and global news outlets retweeted, republished and engaged with tweets by confirmed Kremlin-linked troll accounts thousands of times. (PolitiTweet named as source.)

- [CNN](#): "Twitter to tell 677,775 people they interacted with Kremlin-linked trolls" — Twitter will inform nearly 700,000 people in the U.S. that they either followed a Kremlin-linked troll account, or retweeted or liked a tweet sent by one of the accounts, the social media company said Friday. (PolitiTweet linked as source.)
- [The Daily Beast](#): "Michael Flynn Followed Russian Troll Accounts, Pushed Their Messages in Days Before Election" — Trump's notoriously Kremlin-friendly national security adviser amplified Russian messages right when they mattered most—in the days leading up to Nov. 8, 2016.
- [Bellingcat](#): "Как кремлевский тролль обманул всю Америку" — Russian investigative journalism piece exposing the propaganda account @TEN_GOP (and cites/is sourced by PolitiTweet). Written by Ben Nimmo and the [Digital Forensic Research Lab](#) (DFRLab).
- (See also: [impact tweet](#), [relevance tweet](#).)
- [WhoAreMyRepresentatives.org](#) — a simple tool to look up who represents a particular address in government.
 - Used more than 1 million times and maintains steady traffic.
 - Included on the top spot of [Hacker News](#) for over nine hours.
 - Featured on [ProductHunt](#).
 - Included on the front page of [Reddit](#).
 - Received an invitation (albeit informal) to visit Google.
 - Shared by [Dave Lee](#), [Colin Wright](#), [HANA](#), [Mike Elgan](#), and others.
 - Featured in [BoingBoing](#), [Bustle](#), [TimeOut](#) (twice), & others.
- TrumpWire — a project (now defunct) that sent a SMS notification whenever Donald Trump signed an executive order.
- [Foia.fyi](#) — a simple website that simplifies the process of submitting a FOIA request.
- [Concision.co](#) — a simple word processing tool for quick copy-paste analysis
- [OPENWI:RE](#) — a weekly newsletter highlighting the best of the week's adversarial journalism and "think" pieces, with an emphasis on issues of foreign policy, digital privacy, and technology.
- [Deaddrop](#) — secure, authenticated, and monitored file 'dead drops.'
- [LibreNews](#) — a free, open source, speedy, and deeply customizable breaking news notification system for Android phones. Over three thousand active daily users.
- [DroneScout API](#) — an API and web interface for processing the Bureau of Investigative Journalism's drone strike data.
- [WhyPrivacyMatters.org](#) — a collaborative project to argue for privacy.
 - Translated into 11 languages (and counting).
 - Over 28 [contributors](#).

- [530ZULU](#) — a twice daily concise email news briefing. (Sign up for it. It's great.)
- [Vog](#) — an open source browser extension (Firefox, Opera, and Chrome) for extracting open-graph data from a webpage without having to deal with source files.

Professional Experience

Note that my roles at Politiwatch and PACTF are excluded from this list, as they are listed under [Organizations](#) and listing them here would be redundant.

Torch (summer 2017): worked at a New York City tech+politics startup.

- Led the development of Torch's "scraping" technology ([OpenParser](#))
- Rebranded a major element of the Torch platform, making the platform more immediately useful and accessible to non-technical users
- Provided the company with gigabytes of invaluable civic information
- Position obtained after they reached out to me about [WhyAreMyRepresentatives.org](#)

"Freelance" Programming, Writing, and Design (October 2014-November 2016)

- Created software, text, and graphics for over 200 clients
- Projects included full-blown desktop apps, company blog posts, product descriptions, websites, and logos
- Specialized in data-driven applications

Volunteer Work

- **Coding Circle** (September 2016—present): taught computer science to underprivileged children
- **PDO Writing** (Winter 2017): taught writing to underprivileged children
- **Project Happy** (Fall 2012-Spring 2015): spent time with children with disabilities to make their lives feel a little bit more normal

Competitions

See 'Academics' for the list of awards I have received through my school. These awards are omitted in this subsection.

- **HackNEHS 1st place** (Winter 2018): won first place in [HackNEHS](#), a 'hackathon' for New England high schools.
- **HackACE 1st place (tied)** (Winter 2017): tied for first place in [HackACE](#).

I am currently competing with [Blueshells](#) in CyberPatriot X. (Platinum division.)

Personal Development

- **Cambridge Scholars Programme** (summer 2016): Attended *Cambridge Scholars Programme* the summer after my freshman year of high school. I did coursework in robotics and physics, and received an 'A' in all classes.
- **Mentors in Violence Prevention** (Fall 2016 and Winter 2017): took part in a six-week course in preventing gender-based violence and how to be an ally.