

EFFING AWESOME

Take a peek into the origin of the world's leading defender of digital rights and understand what it takes to protect your civil liberties online with **Mayank Sharma**.

When Nelson Pavlosky and Luke Smith received the DMCA takedown notice they weren't really surprised. After all, the Philosophy sophomores at Swarthmore College in Philadelphia had uploaded leaked memos from the billion-dollar voting machine manufacturer Diebold. Pavlosky and Smith weren't voting machine activists. However, they wanted to challenge Diebold in court for abusing copyright law. The teenagers argued that Diebold couldn't claim copyright over documents that revealed possible flaws with the voting machines and possible evidence of wrongdoing.

In an email exchange with us, Pavlosky recounted those times: "We were expecting legal threats from

Diebold but we hadn't actually planned out exactly what we were going to do once we received them. Neither of us had sued a corporation before and we were fuzzy on the mechanics of doing so; where we would find the money to pay lawyers." That's when one of their friends pointed towards the Electronic Frontier Foundation (EFF). "The EFF informed us that they were already filing a lawsuit against Diebold on behalf of a non-profit ISP called the Online Policy Group, and they asked us if we'd like to join in on the lawsuit fun." The duo agreed. The EFF then put them in touch with the Stanford Cyberlaw Clinic, which represented them *pro-bono*. After a year, the students came out on top, won the case and set a

EFF's litigious journey

Since its inception in 1990, EFF has undertaken important cases and achieved landmark victories in its self-appointed role as protector of users' digital rights. Its opponents have included the US government, the Federal Communications Commission (FCC), and various entertainment and electronics companies, among others.

The EFF's long history of fighting new bills and amendments in the US courts has resulted in several celebrated cases relating to free speech, file sharing, digital rights management, privacy, patents, NSA spying, and more.

In the Diebold case mentioned in the feature, the EFF set a precedent by fighting on behalf of an ISP, exposing Diebold's bogus copyright claims. Also mentioned in the feature is the Bernstein case,

when the EFF took on the US government and got a favourable verdict which forced it to change the draconian laws that treated privacy protection as a potential threat to national security.

In one of the famous victory for free speech the EFF successfully defended a group of online journalists against subpoenas from Apple Computers, which was later ruled to be unenforceable. The foundation also filed a class action lawsuit against Sony BMG for distributing music CDs that contained software to implement copy protection and Digital Rights Management and also covertly allowed the company to spy on the consumer's listening behaviour. Eventually Sony agreed to withdraw the discs and took steps to fix the damage.

Recently, in October 2013, EFF filed a petition at the US Patent and Trademark Office to take a second look at the patent owned by Personal Audio LLC. The company claims its patents cover all forms of podcasting and has already sued a handful of small and large podcasters. In April 2014, the Patent Trial and Appeal Board (PTAB) sided with the EFF and has allowed EFF's petition and ordered a review.

The EFF is also working with the the American Civil Liberties Union (ACLU) as co-counsel to craft an appeal to a ruling in a case filed by an Idaho nurse against President Barack Obama and several US intelligence agencies for violating her Fourth Amendment rights by the various NSA mass-surveillance programs.

legal precedent, which Pavlosky credits to the EFF. "Without the EFF's help, we wouldn't have had a clue what to do, and we wouldn't have become part of a court case that is cited in cyber law textbooks around the country."

The EFF bomb

"The EFF is a non-profit civil liberties organisation that works to defend your rights in the digital world," sums up Shari Steele, EFF's Executive Director, in a video titled "EFF's Five Famous Friends". The video also features Sci-Fi writer Cory Doctorow, who credits the EFF for making sure "that those civil liberties values that informed the best parts of democracy for centuries, make the transition to the 21st century, make the transition to the internet."

EFF was founded in July 1990 as an international digital rights group. The term digital rights, in simple terms, is used to describe the rights that enable users to access, use, create and publish digital media. It also covers the right to access, and use of communication networks, computers and electronic devices.

One of the main catalysts that led to the formation of the EFF was the raid on Steve Jackson Games, a small games book publisher in Texas. As part of a series of raids in early 1990 to track a copied document that described the working of the emergency 911 system, the United States Secret Service seized all electronic equipment and copies of an upcoming game books from Steve Jackson Games. While the equipment was returned when they couldn't find any evidence of wrongdoing, the small-time business was left in tatters.

This event convinced a bunch of Silicon Valley technologists that the authorities weren't informed about emerging forms of online communication and that there was a need for increased protection for civil liberties in this digital era. That's when Mitch Kapor, former president of the Lotus Development Corporation, John Perry Barlow, a poet and musician, and John Gilmore, a prolific free software hacker and co-founder of Cygnus Solutions, got together and

founded the EFF in July 1990. Kapor provided the initial funding and Apple co-founder Steve Wozniak also pitched in.

However, forming a foundation wasn't the initial plan. Barlow and Kapor just wanted to hire a law firm and sue the Secret Service on behalf of Steve Jackson Games. In a keynote at the 2008 Digital Freedom Conference in Iceland, Barlow recounted that the plan was to "re-assert the constitution in cyberspace with a couple of surgical legal actions." However, at around that time Barlow received an email from someone in what was still the Soviet Union who had heard of their actions to protect the American constitution on the internet and asked "What about us? We don't have a constitution."

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Nelson Pavlosky completed his BA in Philosophy and went on to graduate from George Mason Law School.





Richard Esguerra, EFF's Development Director, mc'ing the annual Pioneer Awards. The awards recognise individuals "who have made significant contributions to the empowerment of individuals in using computers".
Image credit: Alex Schoenfeldt

According to Barlow, that's when it "dawned on us that in cyberspace the Bill of Rights is a set of local ordinances. And in fact no rights can be conferred in cyberspace by anybody." That's when they decided to create an organisation with a much wider mandate.

EFF's first order of business was to sue the US Secret Service on behalf of Steve Jackson Games and several of the company's bulletin board users whose personal messages had been accessed and deleted by Secret Service agents. Since none of the EFF's founding members were lawyers, the tech press of the time didn't buy the argument that it was trying to safeguard the civil liberty issues of the falsely accused and labelled the EFF a "defence fund for hackers".

However, a couple of years later Sam Sparks, the US District Judge hearing this case, not only reprimanded the Secret Service for its actions but also held that electronic mail deserves at least as much protection as telephone calls. It is because of this case that law enforcement agencies (in the US, at least) must now produce a warrant that particularly describes all electronic mail messages before going through them.

The EFF next came to the rescue of Dan Bernstein, a University of California mathematics PhD student, who was prevented by the US Department of



EFF staffers Aaron Jue and Magdalena Kazmierczak talking to a new EFF member.
Image credit: Alex Schoenfeldt

Justice from publishing his encryption program on the internet. The EFF triumphed again, and Judge Marilyn Hall Patel ruled, for the first time ever, that written software code is speech protected by the First Amendment. The case also forced the government to change its regulations and allowed everyone to publish encryption software on the internet without prior permission from the US government.

By the time the verdicts were delivered in these cases, the EFF had established itself as an authority in the civil libertarian community and was a bubbling wellspring of information on electronic civil rights and privacy issues.

Electronic freedom fighters

Fast forward a couple of decades and the EFF today is an expansive organisation. It is particularly interested in issues related to fair use, free speech and privacy. They'll take on copyright trolls, DMCA and patent abusers, help protect bloggers' rights, and support initiatives against mass surveillance, by the government and by the internet companies.

The EFF not only provides legal assistance to relevant cases, but also does a lot of advocacy work by organising campaigns to spread awareness and rally support against harmful actions and legislation.

Encrypting the web

EFF's involvement with encryption can be traced back to its origins, when it defended Dr Dan Bernstein and rewrote the rules of distributing encryption programs. Then in 1998 it built the DES cracker, which cracked the DES (Data Encryption Standard) by a brute force attack. It helped prove the lack of security of the DES, which back then was a federal standard.

The EFF is also the author of the popular *HTTPS Everywhere* browser plugin for *Firefox*, *Chrome*, and *Opera* browsers. The extension forces the connection to use the encrypted HTTPS connection when communicating with a website instead of the unsecure HTTP, which is the default on many websites. It also alerts you when you run into

encrypted pages with links that take you to an unencrypted website.

Before launching the *HTTPS Everywhere* plugin the EFF began asking some of the largest sites on the web, including Google, Facebook, Twitter and Wikipedia, to start offering HTTPS versions of their sites. They also launched the SSL Observatory project, which investigates the certificates used to secure all of the sites encrypted with HTTPS.

In light of the NSA's surveillance programs, the EFF suggested five best practices for encryption for online companies. It also queried the leading companies about their initiatives to bolster encryption and published the results as part of its Encrypt The Web initiative. Recently, the foundation

has announced the Let's Encrypt certification authority (CA) initiative, which will start issuing free-of-cost security certificates to websites in 2015.



You can even install the *HTTPS Everywhere* extension in *Firefox* for Android.

It also publishes white papers and reports that assess and explain threats to the average user from the government as well as the industry. Finally, it also employs programmers who develop tools to keep users safe online.

The EFF keeps its eyes peeled for messages requesting legal assistance on info@eff.org. Communications with the EFF asking for legal counsel are protected by the attorney/client privilege regardless of whether or not the EFF takes up a case. Since it has limited resources, the EFF is likely to take on cases that will have a large impact on the law and whose decision will help define how the law is applied in future cases.

Working a lawsuit usually costs a lot of money, and since the EFF has limited resources it only helps those who simply can't afford legal representation. In their last financial period they spent over \$120,000 (about £80,000) in legal and professional fees and almost \$90,000 (about £60,000) for various litigation expenses. Rebecca Jeschke, the EFF's Media Relations Director and Digital Rights Analyst, told us that the EFF currently has a staff of 63 employees, of whom 20 are legal staff. They are however assisted by others, Jeschke says: "Our activists and technologists and analysts also help on legal cases for background and insight, etc." If the EFF can't take up your case, they'll redirect you to another attorney on their Cooperating Attorneys list, who are passionate about the same things as the EFF.

Advocacy is handled by the 15 activists and analysts employed for this purpose. Then there's the technology products team of seven, which develops tools such as *HTTPS Everywhere*. There are also general technologists who provide support and help build things like web pages for the activism, and folks who answer emails from members.

Support with your wallets

The EFF gets a high proportion of its funds through grants, so the foundation has to employ a bunch of people to help write the grant bids. Of its total income



Jacob Applebaum, a core member of the Tor project, sits under a dunk tank to raise money for the Electronic Frontier Foundation.

Image credit: Scott Beale / Laughing Squid




in the last financial year, over \$2.5 million (about £1.6 million) were grants from various organisations. Another sizeable chunk of the income, over \$2 million (about £1.3 million), were from the sales proceeds of the Humble Bundles. Humble Bundle Inc, shares its income with various charities and organisations including the EFF in a completely transparent fashion.

However, the biggest source of income for the EFF is from direct individual contributions. In the same financial year, the EFF received over \$4.3 million (about £2.7 million) from individual supporters like you. Since the EFF is a registered 501(c)(3) non-profit organisation, all donations are tax deductible if you're a US citizen. All donations get you a 12-month membership and discounts on general admission to EFF events.

There are also several other ways you can support the foundation, such as by donating air miles and gifting stocks. Visit the supporters page at <https://supporters.eff.org> for more details of such programs.

We at Linux Voice also appreciate the EFF's efforts in safeguarding our digital rights, and it's our pleasure to include the EFF in our "Giving Profits Back" scheme. You can read about our profit sharing scheme in detail in Issue 10. As promised in our crowdfunding campaign, at the end of every year we'll give 50% of our profits back to Free Software and Linux communities as per our readers wishes and EFF is one of the organisations you can choose to give to.

The Electronic Frontier Foundation is doing important work, and the Snowden revelations show that it has a huge amount of work to keep on top of. Everything the organisation does, in one part or the other, reflects one of its founders, John Perry Barlow's, ambition to be a good ancestor: "If you want to be a good ancestor you want to keep the internet open to anything that flows over it, which might be awful stuff. But as John Stuart Mill said, liberty resides in the rights of that person whose views you find most odious." Keep up the good work, team! 

Use Panoptick (<http://panoptick.eff.org>) to see how much information your web browser gives away to websites.

"The EFF is interested in issues related to fair use, free speech and privacy."