

People are stashing irrevocable child porn links, dox, copyright infringement, and leaked state secrets in the blockchain

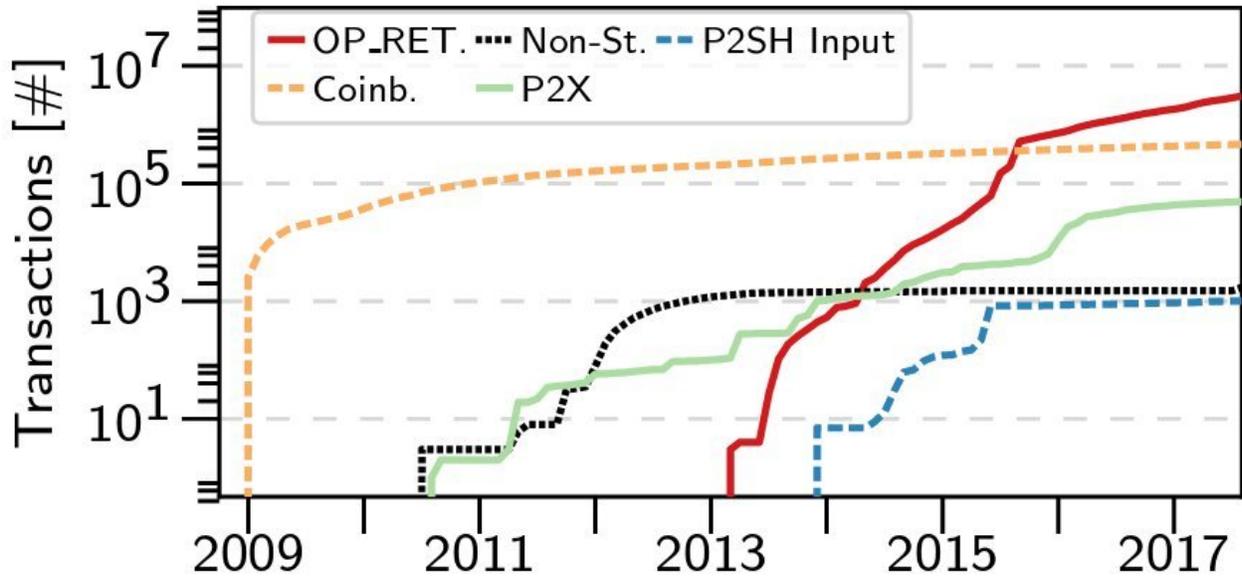


Fig. 2: Cumulative numbers of detected transactions per data insertion method

By design, data placed in the blockchain is visible to everyone in the world and can never be removed; everyone who mines bitcoin makes a copy of the blockchain, and so any illegal content stashed in the blockchain ends up on the computers of every miner.

Many governments make possession of certain materials -- state secrets, images of the sexual abuse of children, copyright infringing materials etc -- a civil or even criminal offense under any circumstances.

In order to investigate whether this means that bitcoin miners are all in possession of illegal data, a group of German researchers conducted a census of "arbitrary blockchain content" that had been stashed in the blockchain through methods like CryptoGraffiti, the Satoshi Uploader, P2SH Injectors, and Apertus.

They found that there is already a lot of potentially scary stuff stashed (forever) in the blockchain, including extensive links to sites that host images of the sexual abuse of children, backups of the Wik-

ileaks #cablegate data, pro-democracy news that has been banned in China, etc.

This is interesting: on the one hand, it will give authoritarian regimes a perfect rubric for cracking down on Bitcoin ("Every bitcoin miner is a child pornographer!"); on the other hand, it can raise the price of censoring leaks related to government misconduct to the entire value of a nation's cryptocurrency transactions and assets.

The seriousness of objectionable content stored on public blockchains has been motivated by multiple works [56,57,43,11,40,51]. These works, however, focus on reporting individual incidents or consist of preliminary analyses of the distribution and general utilization of content insertion. To the best of our knowledge, this paper gives the first comprehensive analysis of this problem space, including a categorization of objectionable content and a survey of potential risks for users if such content enters the blockchain. In contrast to previously considered attacks on Bitcoin's ecosystem [22,27], illegal content can be inserted instantly at comparably low costs and can put all participants at risk. The utilization of chameleon hash functions [15] to chain blocks recently opened up a potential approach to mitigate unwanted or illegal blockchain content [11]. Here, a single blockchain maintainer or a small group of maintainers can retrospectively revert single transactions, e.g., due to illegal content. To overcome arising trust issues, μ chain [51] leverages the consensus approach of traditional blockchains to vote on alterations of the blockchain history. As these approaches tackle unwanted content for newly designed blockchains, we seek to motivate a discussion on countermeasures also for existing systems, e.g., Bitcoin.

[A Quantitative Analysis of the Impact of Arbitrary Blockchain Content on Bitcoin](#) [Roman Matzutt, Jens Hiller, Martin Henze, Jan Henrik Ziegeldorf, Dirk Mullmann, Oliver Hohlfeld, and Klaus Wehrle/Financial Cryptography and Data Security 2018]

(via [4 Short Links](#))

SHARE / TWEET / 8 COMMENTS

BITCOIN / BLOCKCHAIN / CENSORSHIP / COMPUTER SCIENCE / DISTRIBUTED LEDGERS / PERMASAMIZDATA / SCHOLARSHIP

GET THE BOING BOING NEWSLETTER

SUBSCRIBE

Loading...

Facebook insists that Cambridge Analytica didn't "breach" data, but "misused" it, and they're willing to sue anyone who says otherwise

Yesterday's bombshell article in the Guardian about the way that Cambridge Analytica was able to extract tens of millions of Facebook users' data without their consent was preceded by plenty of damage control on Facebook's part: they repeatedly threatened to sue news outlets if they reported on the story and fired the whistleblower who came [...]

[READ THE REST](#)



European Parliament ambushed by doctored version of pending internet censorship rules that sneaks filtering into all online services

For months, the European Parliament has been negotiating over a new copyright rule, with rightsholder organizations demanding that some online services implement censoring filters that prevent anyone from uploading text, sounds or images if they have been claimed by a copyright holder.

READ THE REST

-1a. Online content sharing service providers perform an act of communication to the public and shall conclude fair and appropriate licensing agreements with rightholders. If the rightholder does not agree to conclude a license, the online content sharing service providers shall still be obliged to the obligations set in paragraph 1 and 2 of this Article. Licensing agreements concluded by the online content sharing service providers with rights holders shall cover the liability for works uploaded by the users of their services in line with terms and conditions set out in the licensing agreement, provided that these users do not act for commercial purposes or are not the rightholder or his representative.

Ban on discussing Poland's complicity in Holocaust draws worldwide attention to Poland's complicity in Holocaust

We all know that Poland resisted the Nazi invasion and that Poles and Polish Jews bore the brunt of the Holocaust. But the world is now finding out all about Polish complicity in the Holocaust, thanks to its government trying to ban discussion of it. The new law, which took effect this week, prompted widespread [...]

READ THE REST



This charger case doubles your Nintendo Switch's battery life

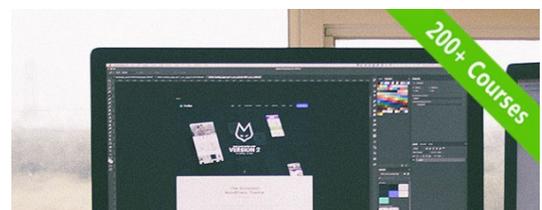
The Nintendo Switch is king when it comes to gaming on the go, but it's tough to lose yourself in Zelda: Breath of the Wild or Skyrim if your battery dies out. That's where this Nintendo Switch Battery Charger Case comes into play. Built exclusively for Nintendo Switch, this pack allows for uninterrupted charging while you play, [...]

READ THE REST



Launch a design career with help from this huge bundle

Creative designers play a pivotal role in engaging target audiences and customers, and while companies are eager to bring more of these professionals on board, you'll have a hard time getting your foot in the door if you're not using the industry's best tools. From Adobe to Maya,



the eduCBA Design & Multimedia Lifetime Subscription Bundle [...]

READ THE REST



These 3 courses will prepare you for Lean Six Sigma certification exams

As more companies aim to reel in costs and boost productivity, project managers are becoming an essential part of many operations, and they're paid handsomely for their expertise. But, while demand is high, you'll have a hard time getting your foot in the door if you're not toting the right certifications. The Official Lean Six Sigma [...]

READ THE REST



Read the rules you agree to by using this website in our **Terms of Service**.

We are a participant in the Amazon Services LLC Associates Program, an affiliate advertising program designed to provide a means for us to earn fees by linking to Amazon.com and affiliated sites.

Who will be eaten first? Our forum rules are detailed in the **Community Guidelines**.

Boing Boing is published under a **Creative Commons license** except where otherwise noted.

Mark Frauenfelder

Cory Doctorow

David Pescovitz

Xeni Jardin

Rob Beschizza

Jason Weisberger

Publisher

Ken Snider

Sysadmin

About Us

Contact Us

Advertise

Forums

Shop

Shop Support