

Citizen Four FILM

Ben Everard didn't use Tor to book his cinema tickets and has now been flagged as a troublemaker.

In mid-2013, a trio of journalists boarded a plane to Hong Kong to meet a mysterious person who had recently delivered a small cache of classified documents from the NSA. The source promised to reveal more once they met. Those three people were Glenn Greenwald (a lawyer turned blogger and columnist), Ewan MacAskill (a reporter for the Guardian) and Laura Poitras (a documentary film maker). The person they met turned out to be Edward Snowden and the rest, as they say, is history.

Or is it? Many words have been spoken about Ed (as he likes to be known), but little has been said. Up until now, the three people who met him in Hong Kong have, for the most part, kept their reporting to the leaks, not the leaker. Although the mainstream media has dug through his past, he hasn't yet told his story, and while the history books are full of details of the data leaked, there are still some gaps in the public knowledge of the leak itself.

Citizen Four doesn't completely change that – it's ultimately a film about the actions of the American surveillance state, and Poitras's experience with that, rather than a biography of Edward Snowden – but it does offer a few glimpses round the side of the media firestorm. Poitras takes the viewer

directly into the hotel suite in Hong Kong for the meetings. We see Ed's reactions as the story blows up, but it's told subtly. Viewers have to watch closely to see how his body betrays his stoic words.

The footage of Snowden is interspersed with speakers on privacy and encryption including William Binney (the former NSA leaker), Jacob Appelbaum (Tor developer, journalist and privacy campaigner), and Ladar Levison (former owner of Lavabit). Together, these help give an idea of the impact that total surveillance can have on a society.

The human element

There's little about the details of the leak – it's been well covered elsewhere and film isn't the right medium to explore them. Instead, the film adds a human element to the saga. This has been much missed up until now (with, perhaps, the exception of the excellent book *The Snowden Files* by Luke Harding, but that book focused on the impact on the media establishments and journalists working at them, not the four people holed up in a crowded Hong Kong hotel room).

The geek viewer will appreciate that the technical scenes aren't faked (as so often seems to happen in films). When



"My name is Edward Snowden. I go by Ed".

something is sent encrypted, we see **gpg** spit our seemingly random alpha-numeric characters (no, we don't know if these are actually the encrypted files). When it shows the command line, what else would you expect, but Tails':

```
amnesia@amnesia
```

These are of course small details, but the accuracy there gives us confidence in the accuracy of the film as a whole. Another nice touch was the inclusion of *Tor*, Tails and Debian Gnu/Linux in the film's credits. Eagle-eyed viewers will also learn that Ed's reading material of choice in Hong Kong was written by Cory Doctorow.

The film concludes with a confirmation of the much-rumoured new leaker from within the American surveillance establishment. Few details are given, but much is hinted at. Linux Voice attended the UK premier which included a Q&A session with Potrias where someone asked the director for any new details. Her refusal to answer gave us reason to suspect that we could be in for some more exciting (and worrying) news stories in the future.

```
amnesia@amnesia:~$ rsync -P ghost@216.66.
a/Persistent/YearZero_Download -av
ghost@216.66. password:
Could not chdir to home directory /home/gf
receiving incremental file list
astro_noise
0% 196.23kB/s
```

We appreciated the accuracy of some of the technical details, like including a real command line rather than the fake ones you normally see whenever Hollywood touches on tech.

“Citizen Four is ultimately a film about the actions of the American surveillance state rather than a biography of Edward Snowden.”

LINUX VOICE VERDICT

Footage from inside the hotel room as Edward Snowden leaked the NSA's secrets. Need we say more?



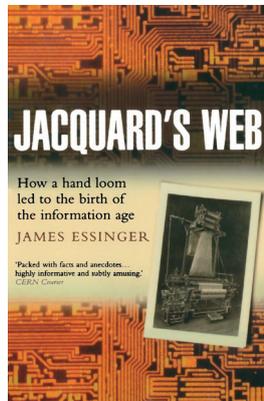
Jaquard's Web: How a hand loom led to the birth of the information age

19th century programmable clothing? Ben Everard is intrigued.

There was one interface that remained virtually unchanged from before Charles Babbage designed the Analytical Engine to well into the 1960's: punched cards.

These were first used by innovative weaver Joseph-Marie Jaquard to improve the speed at which silk could be woven into designs. These looms inspired Babbage in his ultimately futile quest to build a mechanical computer, they were instrumental in the pre-computer calculation machines, and they were considered essential components in almost all early computers.

Essinger follows this narrative and encourages us to follow the links from looms that weave silk to machines that weave information. Overall, it's an enjoyable read, and even people with quite a bit of knowledge of computing history will probably learn something from it.



Don't be fooled by the cover – surprisingly little of this book is actually about weaving clothes.

LINUX VOICE VERDICT

Author James Essinger
 Publisher OUP Oxford
 ISBN 978-0192805782
 Price £9

A slightly unusual angle that forces us to think about the data rather than the machine.

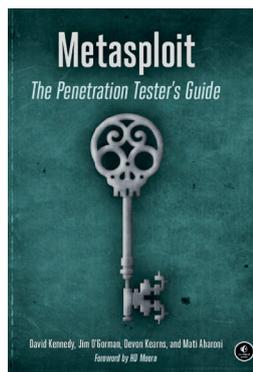


Metasploit: The Penetration Tester's Guide

Ben Everard learns how to exploit computers using PDF files.

Anyone interested in computer security will have come across *Metasploit*. It's a framework that can help with just about every aspect of penetration testing from information gathering to post exploit work. However, to do all this, it has become quite a complex beast. Learning to use *Metasploit* is more like learning to use a new programming language than learning to use most other applications.

Metasploit: The Penetration Tester's Guide is well titled: it's a guide to *Metasploit* for penetration testers. It isn't written for people with no pen testing experience, but it does start at quite a basic level and while it assumes the reader understands basic principals about how computers and networks work, it doesn't assume any prior experience with *Metasploit*. It's a very practical book, and a large proportion is taken up with code examples that are well annotated and explained.



HD Moore – the founder of the Metasploit project – endorses this book in the forward.

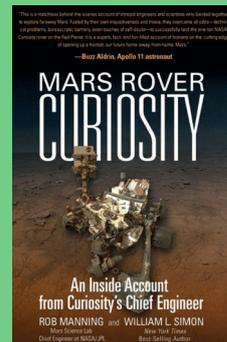
LINUX VOICE VERDICT

Author David Kennedy, Jim O'Gorman, Devon Kearns and Mati Aharoni
 Publisher No Starch Press
 ISBN 978-1593272883
 Price £32.50

A great introduction to the software, but you'll need some knowledge of penetration testing to get the most out of it.



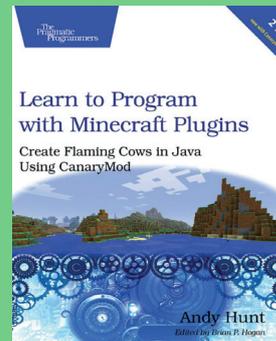
ALSO RELEASED...



Curiosity has spent over a Martian year (687 Earth days) on its new home.

Mars Rover Curiosity

If you've built Ben's ice cream carton robot from issue 4, and you're looking for a new challenge, this book is going to provide the perfect insight. Written by Curiosity's Chief Engineer and endorsed by Buzz Aldrin, it's got to be a must read.



The 2nd edition dumps Bukkit in favour of the CanaryMod library

Learn to program with Minecraft

Kids love *Minecraft*. It's amazing. This second edition of a proven child-friendly title promises that no prior coding experience is necessary, and that your firstborn will soon be creating flaming cows, flying creepers, teleportation, and interactivity.



SVG is a long way from the turtle graphics we cut our teeth on.

SVG Essentials

SVG is about more than being a scalable image format. It can be used for animations, charts, web design and includes transforms and gradient, all from its text-based XML. This is a book aimed at designers that doesn't ignore the complex stuff, making your output visually and functionally more powerful.