

Open Source Software As Activism

March 4, 2017

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@corbett ✓

Pasadena, CA, Physics Postdoc

All software is political. Technology shapes the course of our world and lines of code are votes for a particular future.

Working on Signal iOS, 2013



iPod



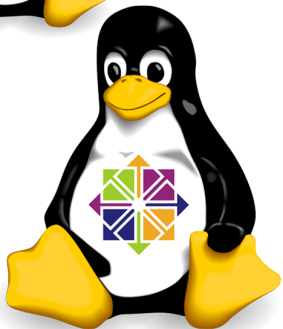
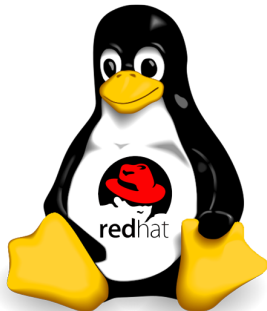
3:29

Tuesday, September 22



Signal 2m ago
New Message!
slide to view







Bruce Schneier is an internationally renowned security technologist, called a "security guru" by *The Economist*. He is the author of twelve books—including his seminal work, *Applied Cryptography*, *Privacy, Algorithms, and Source Code* in C, and *Secrets & Lies*.

Secrets & Lies: Digital Security in a Networked World as well as hundreds of articles, essays, and academic papers. His influential newsletter "Crypto Gram" and blog "Schneier on Security" are read by over 200,000 people. Schneier is a fellow at the Berkman Center for Internet and Society at Harvard Law School, a program fellow at the New America Foundation's Open Technology Institute, a board member of the Electronic Frontier Foundation, and an Advisory Board member of the Electronic Privacy Information Center. He is also the Chief Technology Officer of Resilient Systems, Inc. You can read his blog, essays, and academic papers at www.schneier.com. He tweets at [@schneierb](https://twitter.com/schneierb).

Praise for
**APPLIED
CRYPTOGRAPHY**

"The book should be on the shelf of any computer professional involved in the use or implementation of cryptography."
—*IEEE Software*

"An encyclopedic survey ... could well have been subtitled 'The Joy of Encrypting' ... a useful addition to the library of any active or would-be security practitioner."
—*Cyberlogica*

"... the best introduction to cryptography I've ever seen ... The book the National Security Agency wanted never to be published."
—*Wired magazine*

"... easily ranks as one of the most authoritative in its field."
—*IC Magazine*

"... monumental ... fascinating ... comprehensive ... the definitive work on cryptography for computer programmers."
—*Dr. Dobbs's Journal*

Written by the world's most renowned security technologist, the great visionary of cryptography, 20 years for the most definitive reference on cryptography ever published, *Applied Cryptography*, Protocols, Algorithms, and Source Code in C made security enthusiasts and their compelling manufacturers author Bruce Schneier's name synonymous for the Internet nation.

Included in this edition:
• Exclusive foreword by Bruce Schneier

• Ways to defend the key stream mechanism

• Encryption algorithms, including algorithms from the former Soviet Union and South Africa, and the NSA stream cipher

• Protocols for digital signatures, authentication, secure elections, digital cash, and more

• Detailed information on key management and cryptographic implementations

SCHNEIER



APPLIED
CRYPTOGRAPHY

20TH ANNIVERSARY EDITION

**APPLIED
CRYPTOGRAPHY**



Protocols, Algorithms,
and Source Code in C

BRUCE SCHNEIER

20TH
ANNIVERSARY
EDITION

WILEY

WILEY

This smart, relevant guide is a must for all those committed to computer and cyber security. Bruce Schneier covers general classes of cryptographic protocols and then specific techniques, detailing the inner workings of real-world cryptographic algorithms including the Data Encryption Standard and RSA public-key cryptosystems. This book includes source-code listings and extensive advice on the practical aspects of cryptography implementation, such as the importance of generating truly random numbers and keeping keys secure. It describes dozens of cryptography algorithms, gives practical advice on how to implement them into cryptographic software, and shows how they can be used to solve security problems.

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WILEY

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ILLUSTRATION
C. CORBETT



AS
IMPLEMENTED
IN TEXSENSE
BY

MOYIEM.
C. CORBETT
F. JACOBS

AXOLOTL PROTOCOL

AN ILLUSTRATED PRIMER

0040	86 d0	47 45 54 20 2f 6b 6c 69 71 2f 61 70 69 2f	..GET /k liq/api/
0050		67 69 76 65 5f 61 63 63 65 73 73 5f 74 6f 6b 65	give_acc ess_toke
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0110	17 0d 31 32 30 38 30 33	31 39 30 30 31 32 5a 30	..120803 190012Z0
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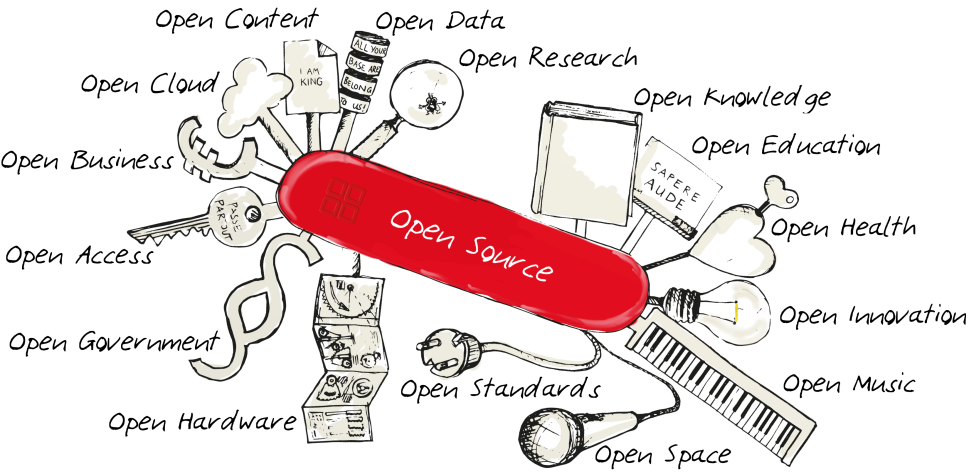
LAMP

Linux

Apache

MySQL

PHP,Perl,Python











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we need more people to participate in the technological “do-ocracy.” we cannot afford to gerrymander.

Working on Signal iOS, 2013



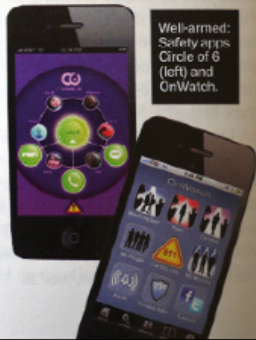
APPS THAT FIGHT RAPE

Move over, Mace, there's a new high-tech way to protect women from sexual violence

■ Unwilling to tolerate rampant sexual attacks in the Indian capital of Delhi, where one of every four rapes in the country occurs, a local nonprofit has devised an ingenious way to keep women safe: the "Fight Back" phone app. Acting as an SOS device, the program sends a text with the user's GPS location to up to five people, including the police, and as a post on Facebook and Twitter. "Even if the fear is that police are apathetic toward the problems of the people, your own friends and family will respond immediately,"

says Hindol Sengupta, cofounder of Whypoll, the "citizen networking" organization that designed the app.

For women in the U.S., the Department of Health and Human Services announced the development of two antiviolence apps: Circle of 6 will allow the user to alert six emergency contacts, and OnWatch will give women immediate access to 911 and campus police and dispatch their exact locations through GPS. Both are expected to be available as free downloads at the App Store in early 2012. —*Lauren N. Williams*



Well-armed:
Safety apps
Circle of 6
(left) and
OnWatch.



Need to Know

Cosmo Fights Campus Rape

80 to 90% of campus rape cases go unreported. Why?

WHY YOU SHOULD JOIN IN

- An estimated 1 in 4 female college students will be the victim of at least one sexual assault.
- 80 to 90% of campus rape cases go unreported.
- Offense victims, both men and women, are often afraid to report the crime.
- College health, counseling, financial, and legal services are often unavailable to the victims.

A New App You Must Download Now

Circle of 6 is a free app that helps you out of tricky social situations. Tap the car icon and a text goes out to six people you've previously chosen, asking for a lift and pulling your whereabouts from your phone's GPS. Or suppose you're desperate for a quick way out of talking to a creeper who's cornered you at a party. A tap on the phone icon asks the same six names for a phone call pretending they need you.

172 www.cosmo.com



A New App You Must Download Now

Called Circle of 6, this free app—it won first place in a contest sponsored by Vice President Joe Biden—helps you out of tricky social

area and need a ride. Tap the car icon and a text goes out to six people you've previously chosen, asking for a lift and pulling your whereabouts from your phone's GPS. Or suppose you're desperate for a quick way out of talking to a creeper who's cornered you at a party. A tap on the phone icon asks the same six names for a phone call pretending they need you.

It's not for life-threatening scenarios; that's where 911 comes in.



MAY THE SOURCE BE WITH YOU!



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Pasadena, CA, Physics Postdoc

more evidence of #immigration turmoil in science: Prof unable to close hire of French Postdoc with Iranian heritage b/c they had other opt

4:34 PM - 3 Mar 2017



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more evidence of #immigration turmoil in science: postdoc at Caltech choosing to leave US for another job early b/c immigration uncertainty

4:34 PM - 3 Mar 2017



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Culture is more important than code, but
code shapes culture.

November, 2016



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Choosing not to be political is not a choice everyone can make.

November, 2016

Purpose	OS X	Ubuntu
Edit text files	TextMate	Sublime
Organize Research papers	Papers.app	Mendeley
Resize windows on grid	SizeUp	CompizConfig Settings Manager
Site specific browser (standalone web apps)	Fluid	Google Chrome Shortcuts
Multiple desktops	Native	Unity tweak tool



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After being away for 1 year, so exciting to see how many more friends I can talk to on [#Signal @whispersystems](#)

1:34 PM - 6 Dec 2016



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We are in a post-truth society. If every scientist/engineer behaved like this? Truth is not a function of number of views. It exists.

1:29 AM - 9 Nov 2016



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I have not yet developed my position on @wikileaks. I have the cables, the internet, now where to start? where to finish?

5:31 AM - 4 Dec 2010



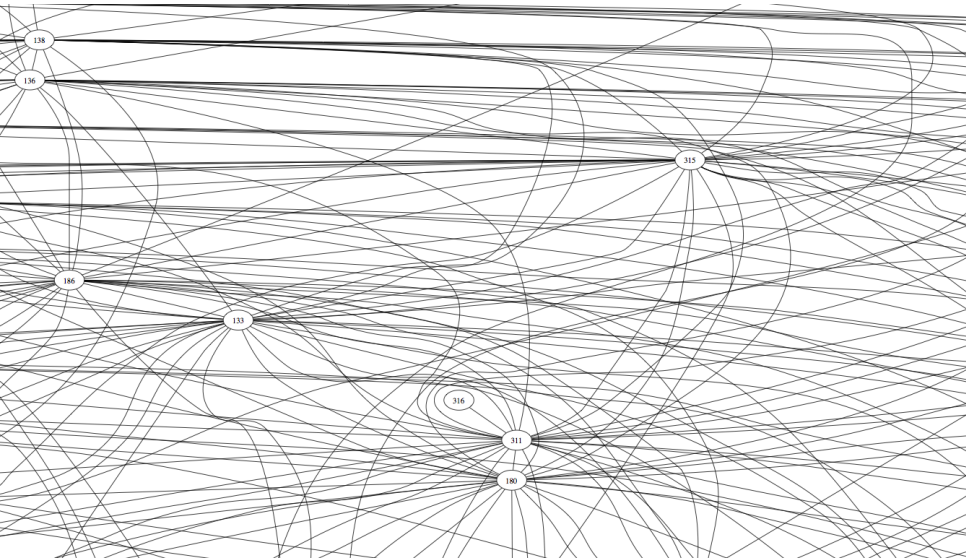
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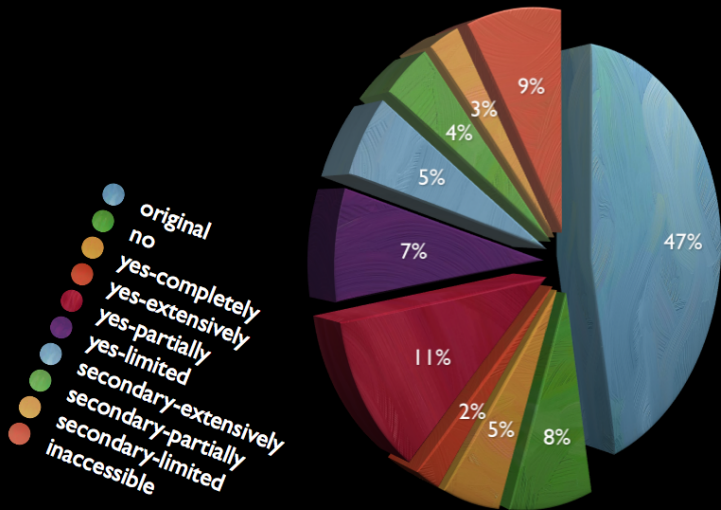
I like things thorough btw. before taking positions on Middle East affairs, I spent 4 years reading, studied Arabic, Hebrew, moved there 2x

5:33 AM - 4 Dec 2010

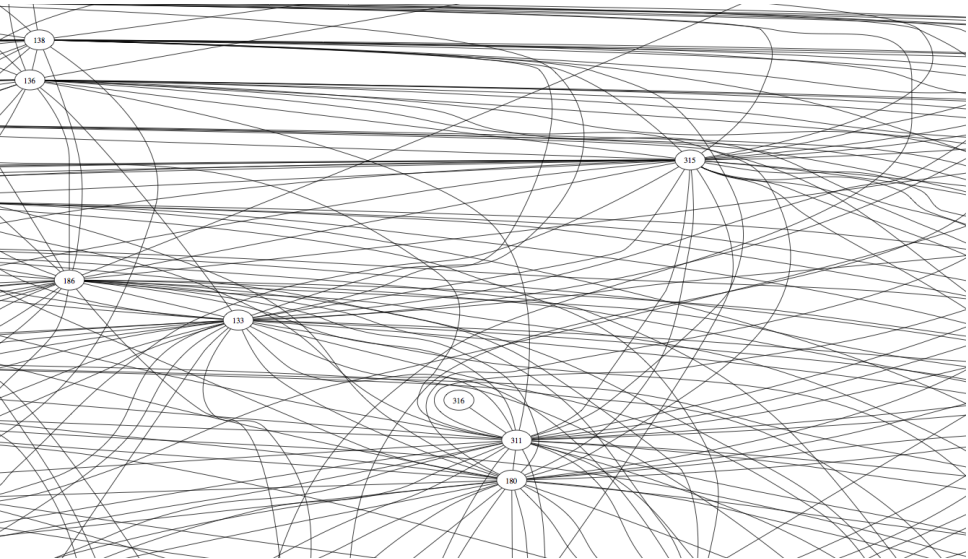
“ A week ago I hatched a plan to educate myself in a more structured manner on what exactly Wikileaks stands for, its history, and its possible futures with the idea of developing a more concrete and informed opinion (and since I have a habit of taking action with respect to my opinions, thereby guiding my future actions). After seeking some advice about what to read via [twitter](#) and [starting with this Julian Assange essay](#) as a basis—a very good one for some philosophical background of the larger aims, I spent awhile digesting the [Wikipedia page on Wikileaks](#) before deciding I wanted to fact check its assertions and that its references might serve as a springboard the next step in my studies

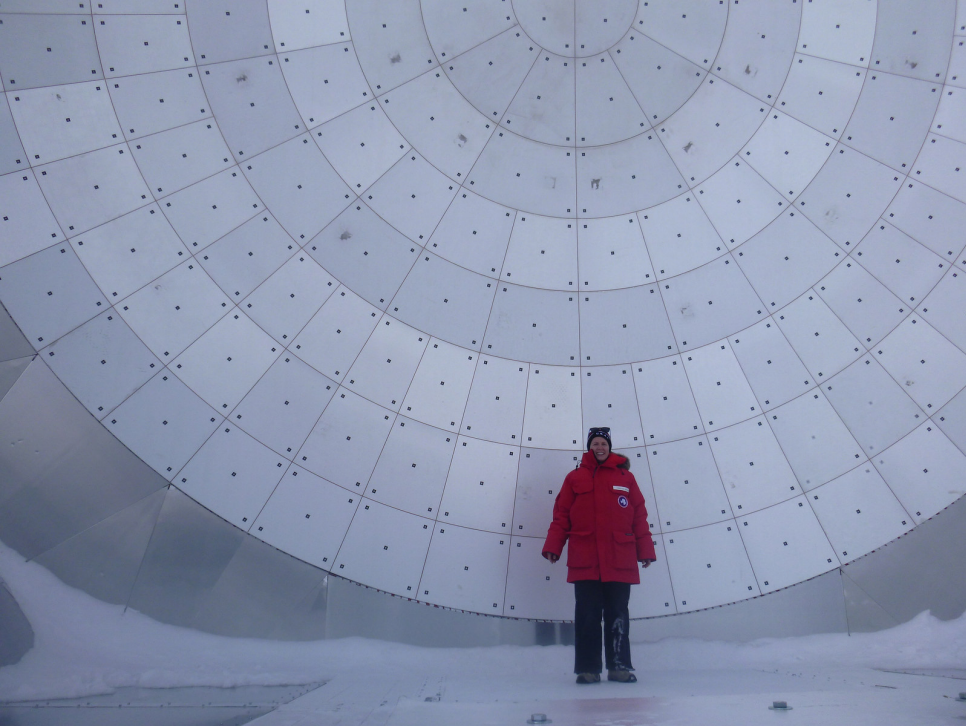


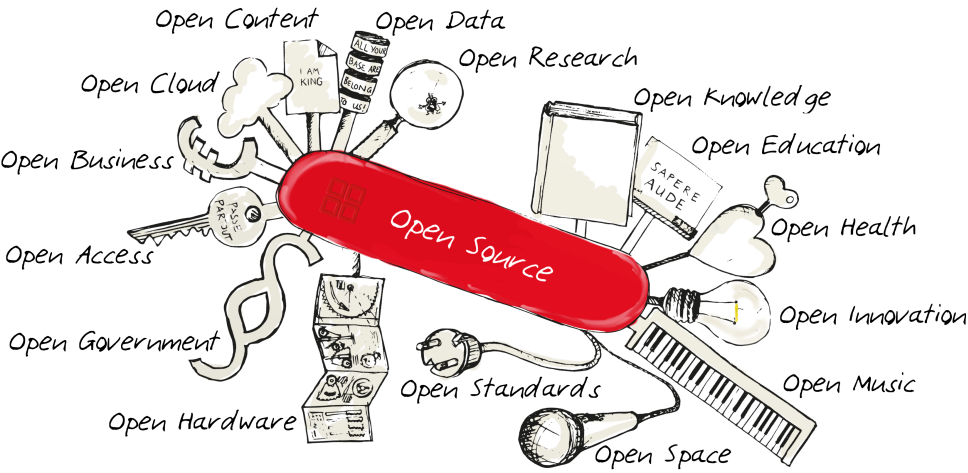
The Numbers













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inclusive empowering in open source will
positively shape our social landscape
moving forward and change our political
landscape

11:00 AM - 4 Mar 2017