



Empowering Hackers To Create A Positive Impact



Keren Elazari
aka @K3r3n3

VERINT

POWERING ACTIONABLE INTELLIGENCE™



Yuval Ne'eman Workshop
for Science, Technology and Security



matrix



SINGULARITY
UNIVERSITY

המערך לביטחון המידע

PRICEWATERHOUSECOOPERS



GIGAOM
RESEARCH

ANALYST

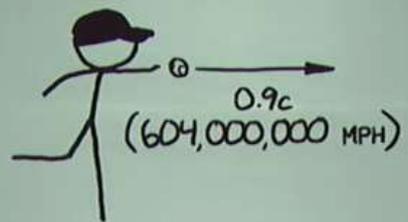


at&t

www.K3r3n3.com



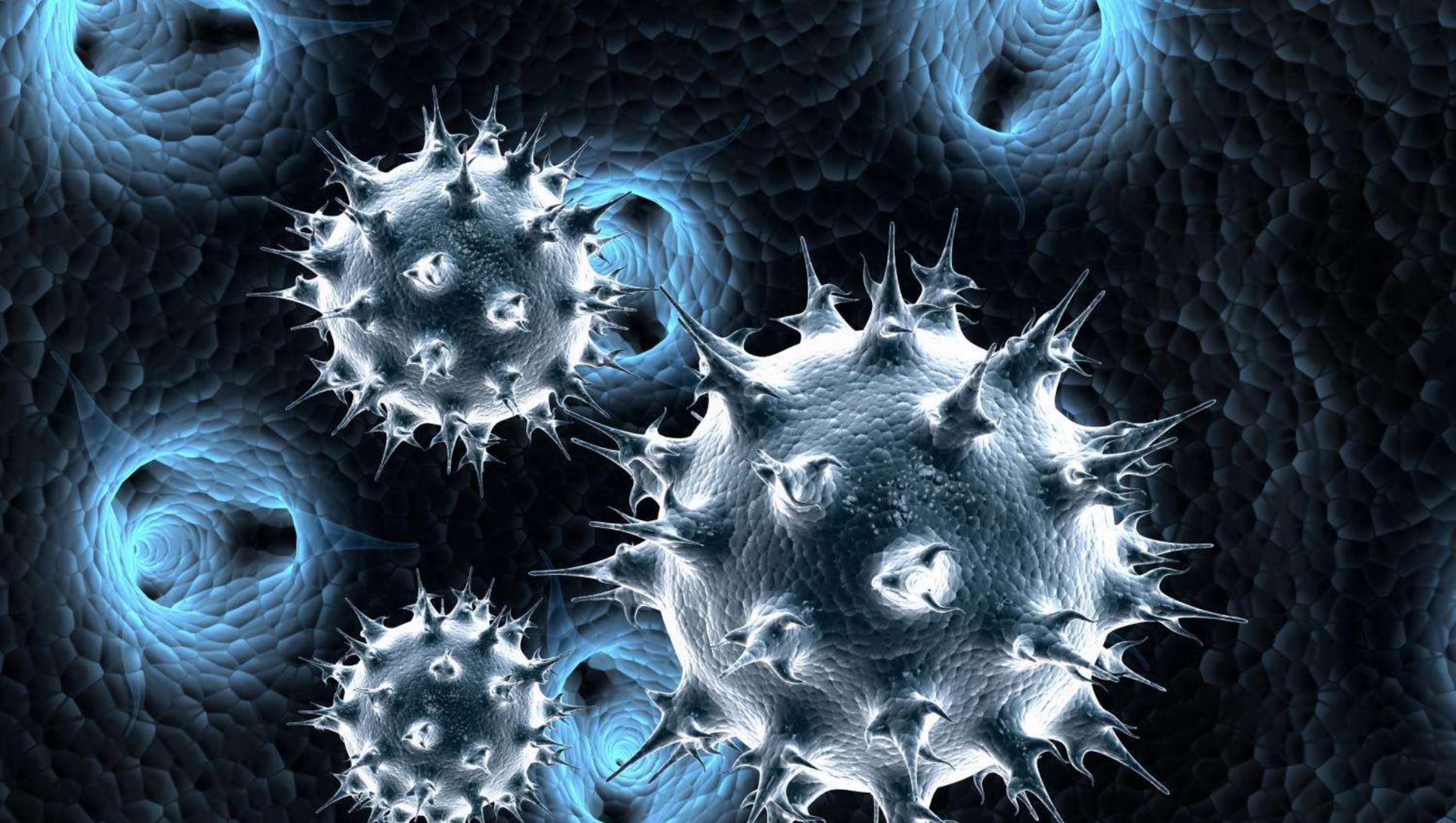




TED



HACKING PEOPLE'S MINDS



Keren Elazari:

Hackers: the Internet's immune system



Favorite



Download



Rate

TED2014 · 16:39 · Filmed Mar 2014

Subtitles available in 10 languages

View interactive transcript

Share
this idea



751,711 Total views

Share this talk and track your influence!

```

struct group_info init_groups = { .usage = ATOMIC_INIT(1) };
struct group_info *groups_alloc(int gidsetsize) {
    struct group_info *group_info;
    int nblocks;
    int i;

    nblocks = (gidsetsize + NGROUPS_PER_BLOCK - 1) / NGROUPS_PER_BLOCK;
    /* Make sure we always allocate at least one indirect block pointer */
    nblocks = nblocks ? : 1;
    group_info = kcalloc(sizeof(*group_info) + nblocks*sizeof(gid_t *), GFP_USER);
    if (!group_info)
        return NULL;
    group_info->ngroups = gidsetsize;
    group_info->nblocks = nblocks;
    atomic_set(&group_info->usage, 1);

    if (gidsetsize <= NGROUPS_SMALL)
        group_info->blocks[0] = group_info->small_block;
    else {
        for (i = 0; i < nblocks; i++) {
            gid_t *b;
            b = (void *)__get_free_page(GFP_USER);
            if (!b)
                goto out_undo_partial_alloc;
            group_info->blocks[i] = b;
        }
    }
    return group_info;
}

out_undo_partial_alloc:
while (--i >= 0) {
    free_page((unsigned long)group_info->blocks[i]);
}
kfree(group_info);
return NULL;
}

EXPORT_SYMBOL(groups_alloc);

void groups_free(struct group_info *group_info)
{
    if (group_info->blocks[0] != group_info->small_block) {
        int i;
        for (i = 0; i < group_info->nblocks; i++)
            free_page((unsigned long)group_info->blocks[i]);
    }
    kfree(group_info);
}

EXPORT_SYMBOL(groups_free);

/* export the group_info to a user-space array */
static int groups_to_user(gid_t __user *grouplist,
                        const struct group

```

ACCESS GRANTED





EXTRA! EXTRA!
READ ALL ABOUT IT!

EPIC FAIL!

...and a ... suggested to keep pace
with an economy that faces inflationary

Don't ...

NOW IS THE TIME



**#1: It's CYBER Space,
Not Information Space**

CYBERNETICS

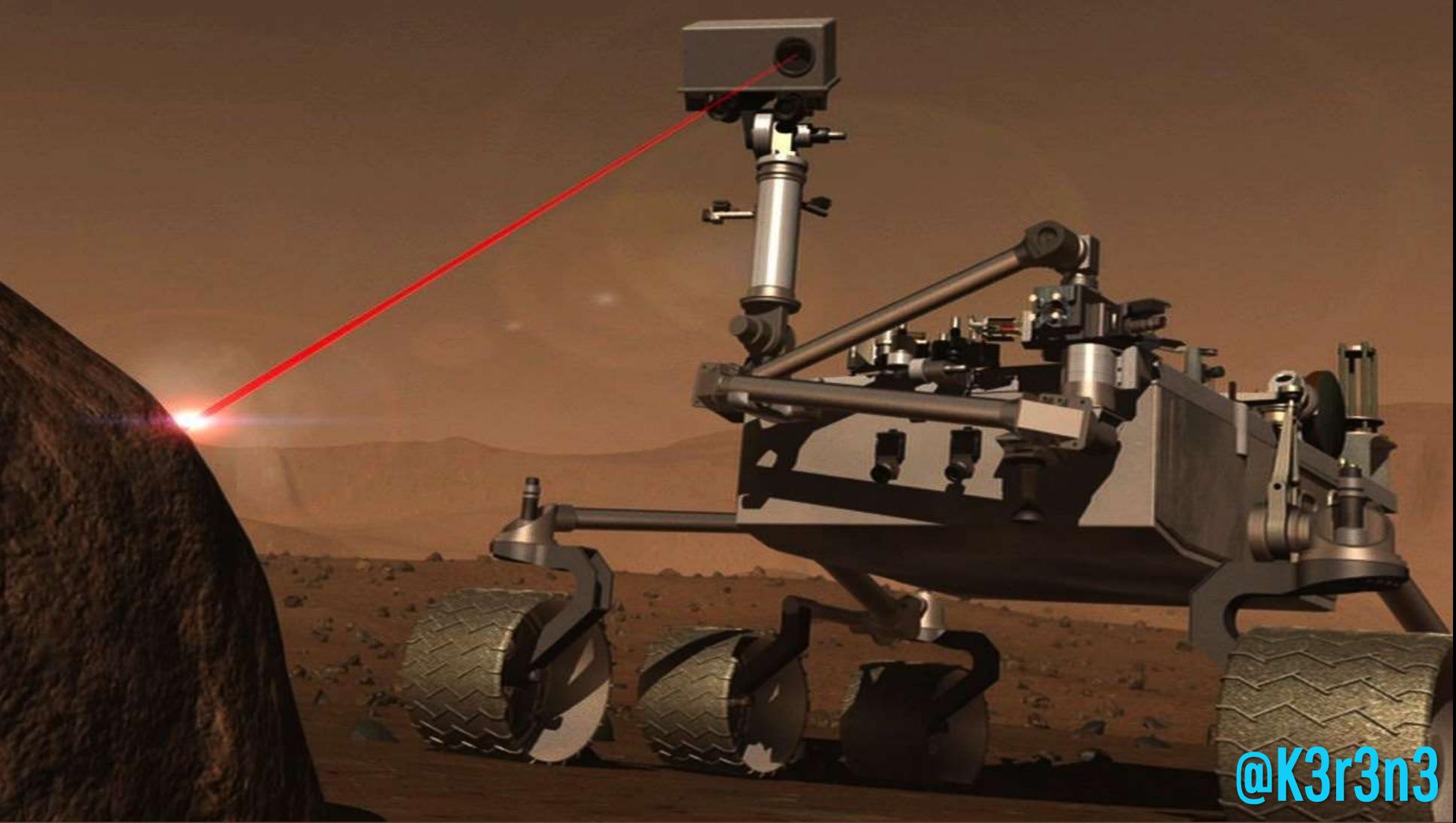
or Control and Communication
in the Animal and the Machine

SECOND EDITION

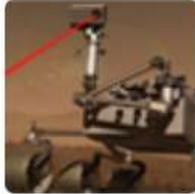
Norbert Wiener







@K3r3n3



Curiosity Rover



@MarsCuriosity

NASA's latest mission to Mars. I arrived at the Red Planet, Aug. 5, 2012 PDT (Aug. 6 UTC).

<http://mars.jpl.nasa.gov/msl/>

Following



1,162 TWEETS

152 FOLLOWING

809,730 FOLLOWERS

Tweet to Curiosity Rover

@MarsCuriosity

Tweets

Following

Followers

Favorites

Lists

Recent images



Tweets All / No replies



Curiosity Rover @MarsCuriosity

1h

"Scene of the Crime" image of my landing site + scattered #MSL hardware. Sharing science? Guilty as charged. 1.usa.gov/QHtwZz

Expand



Curiosity Rover @MarsCuriosity

2h

Live Now: A closer look at my latest images from Mars. @NASAJPL news briefing, Aug. 7 10am PT (1700 UTC) ustream.tv/nasajpl

Expand



Curiosity Rover @MarsCuriosity

3h

Good golly miss MAHLI! New color pic from Mars Hand Lens Imager shows tan sands, no @instagram req #MSL

pic.twitter.com/sPYYxAyW

View photo

@K3r3n3



ORACLE®



Adobe



CISCO SYSTEMS



IBM®



mozilla

Source : "25 Years Of Vulnerabilities: 1988-2012 Sourcefire Research Report"

Java Setup - Progress



ORACLE®

Status: Installing Java



3 Billion Devices Run Java

Computers, Printers, Routers, Cell Phones, BlackBerry, Kindle, Parking Meters, Public Transportation Passes, ATMs, Credit Cards, Home Security Systems, Cable Boxes, TVs...

ORACLE®





Bluetooth



SECURE ALL THE
THINGS!



New shit

has come to light, man..

**“Demonstrate
A Threat -
To Spark
A Solution”**

Barnaby Jack, 1977-2013

Photo: IOACTIVE





RESEARCH What Matters!

The Cavalry Isn't Coming

Starting the Revolution to FSCK it all!

Nicholas J. Percoco & Joshua Corman

@c7five

@joshcorman

I am The Cavalry



<https://www.iamthecavalry.org/>



 **BUILDITSECURE.LY**

**#2: Huge Resources
At Work, Keeping The
World Vulnerable**

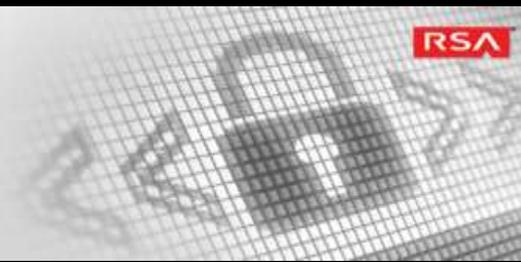


NSA spent \$25 million on 'software vulnerabilities' in 2013

RSA BSAFE

CRYPTOGRAPHIC, CERTIFICATE, AND TRANSPORT
LAYER SECURITY (TLS) SOLUTIONS

RSA



The Register®

Data Center Software Networks Security Policy Business Hardware Science Bootnotes Columnists

SECURITY

RSA: That NSA crypto-algorithm we put in our products? Stop using that

Encryption key tool was dodgy in 2007, and still dodgy now

By John Leyden, 23 Sep 2013

NSA Said to Exploit Heartbleed Bug for Intelligence for Years

By Michael Riley | 2014-04-12T04:00:00Z | [- Comments](#) [Email](#) [Print](#)

The U.S. National Security Agency knew for at least two years about a flaw in the way that many websites send sensitive information, now dubbed the Heartbleed bug, and regularly used it to gather critical intelligence, two people familiar with the matter said.



SECURITY = INSECURE?

MAY 21, 2014

TIME

WORLD WAR ZERO



The global battle to steal your secrets is turning hackers into arms dealers

BY LEV GROSSMAN

MAY 21, 2014

TIME

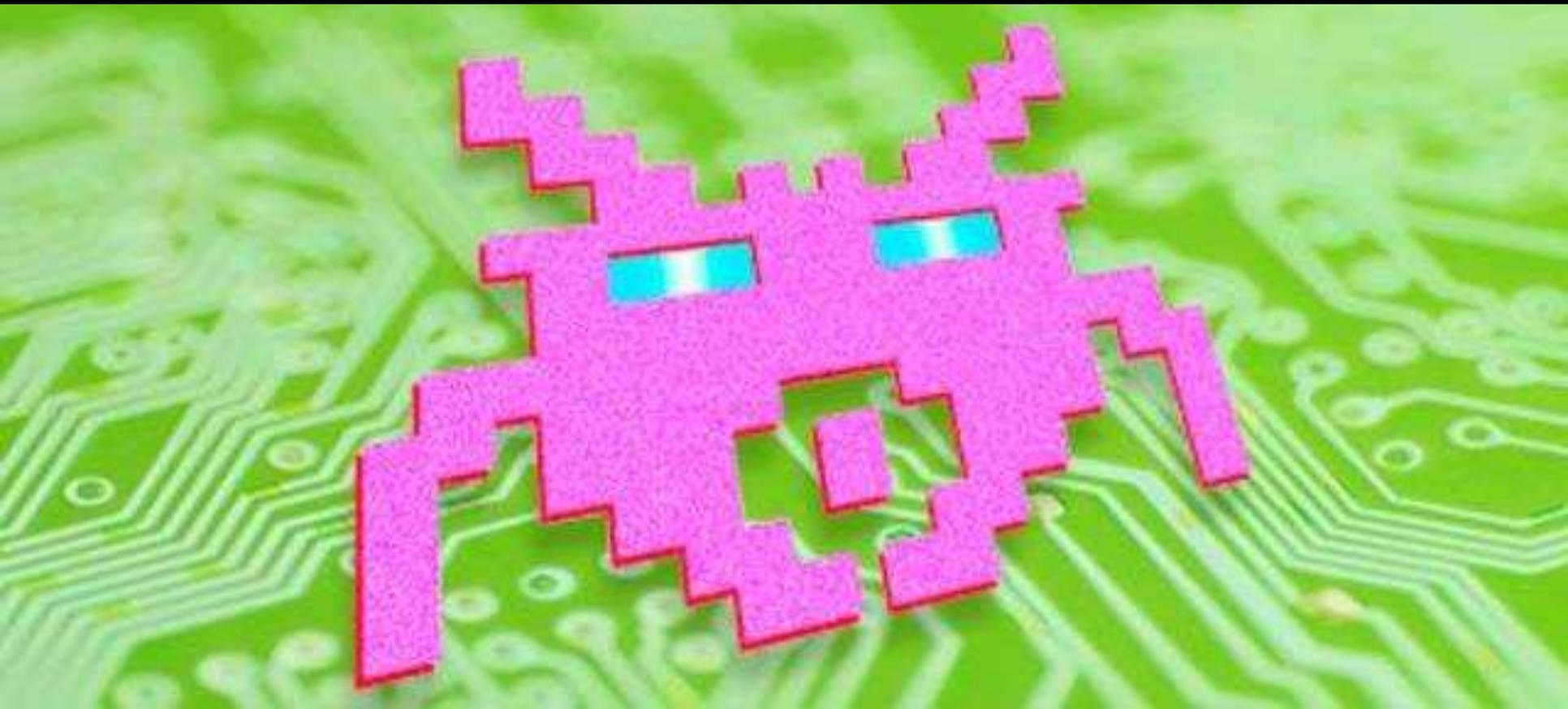
WORLD WAR ZERO



The global battle to steal your secrets is turning hackers into arms dealers

BY LEV GROSSMAN

Don't Keep Your Bugs To Yourself



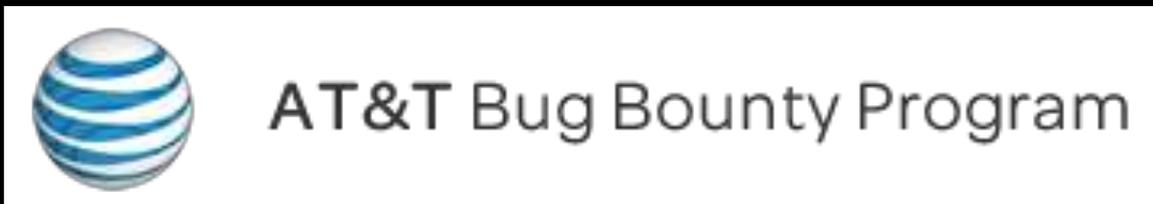
HACKERS GONNA HACK!

FACEBOOK BUG BOUNTY

NOW WITH **MORE** HACKING!



PWN2OWN



www.bugcrowd.com/list-of-bug-bounty-programs

The Internet Bug Bounty

 <p>SANDBOX</p> <p>Sandbox Escapes</p>	 <p>The Internet</p>	 <p>OpenSSL</p>
 <p>Python</p>	 <p>Ruby</p>	 <p>PHP</p>
 <p>Django</p>	 <p>Rails</p>	 <p>Perl</p>
 <p>Phabricator</p>	 <p>Nginx</p>	 <p>Apache httpd</p>

www.hackerone.com/ibb



Online Security Blog

The latest news and insights from Google on security and safety on the Internet

Announcing Project Zero

Posted: Tuesday, July 15, 2014



AFFORD NOT TO



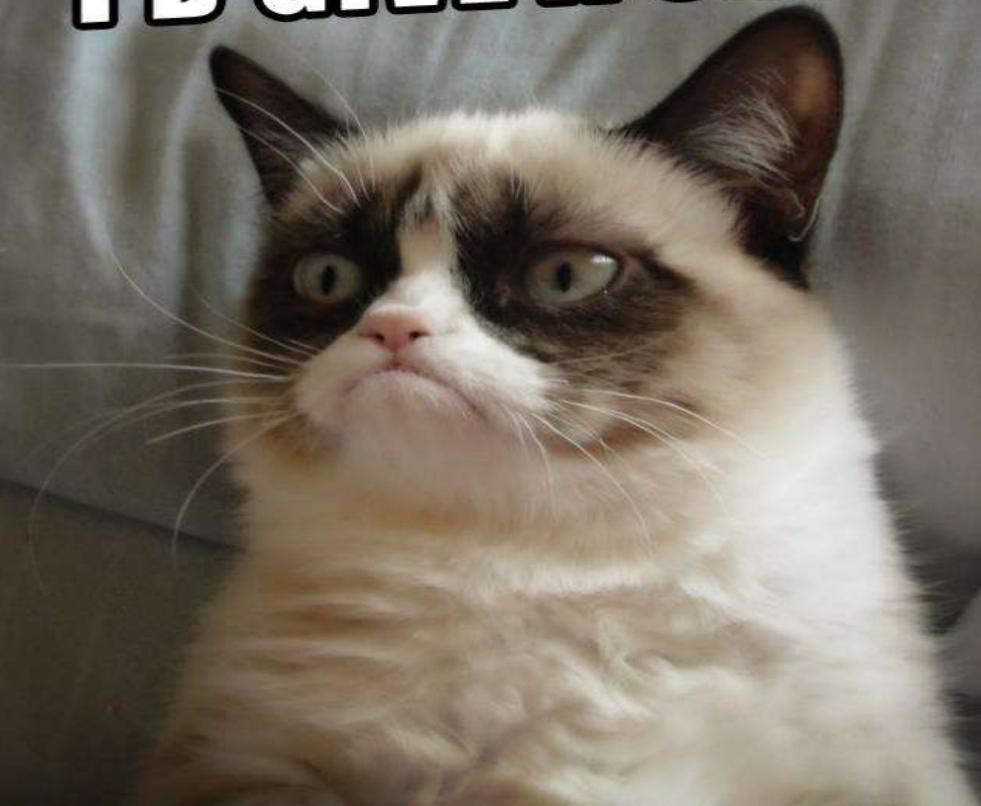
EXPLOIT DATABASE





osvdb

**DO I LOOK LIKE
I'D GIVE A SHIT?**



**#3: We Are As Weak
As Our Weakest Link**



A 3D logo for Fazzio Mechanical Services, Inc. The logo features the word "FAZZIO" in large, bold, purple 3D block letters. The letter "Z" is stylized with a sharp, triangular cutout. To the right of "FAZZIO" is a circular emblem containing a stylized gear or mechanical component. Below the main text is a purple horizontal bar with rounded ends, containing the words "MECHANICAL SERVICES. INC." in white, bold, sans-serif capital letters. The entire logo is mounted on a light-colored wall.

FAZZIO

MECHANICAL SERVICES. INC.



2011 Recruitment plan - Message (HTML)

Message

Reply Reply to All Forward
Respond

Delete Move to Folder Other Actions
Actions

Block Sender Safe Lists Not Junk
Junk E-mail

Categorize Follow Up Mark as Unread
Options

Find Related Select Find
Find

From: web master [webmaster@beyond.com] Sent: to 3.3.2011 18:48
To: @emc.com
Cc:
Subject: 2011 Recruitment plan

Message | 2011 Recruitment plan.xls

I forward this file to you for review. Please open and view it.





ERROR

A problem has been detected and OS has been shut down to prevent damage to your computer.
The problem seems to be caused by the following file: DRIVER.SYS

PAGE_FAULT_IN_NONPAGED_AREA

If this is the first time you've seen this stop error screen, restart your computer. If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any OS updates you might need.

If problems continue, disable or remove any newly installed hardware or software.
Disable BIOS Mode to rem
Advanced St



**#4: The Front Lines –
Are Everybody!**





Botnet

Phishing Campaigns

Spam

Denial of Service



Image by Chris Halderman CC BY 3.0





collaborate

"SILVA"

I'm a SHARK

dapper cat!

This letter, with a
red, white, and blue
background, is a
great example of
a well-designed
font.

**IT'S TIME TO
SHARE.**

Empower The Masses

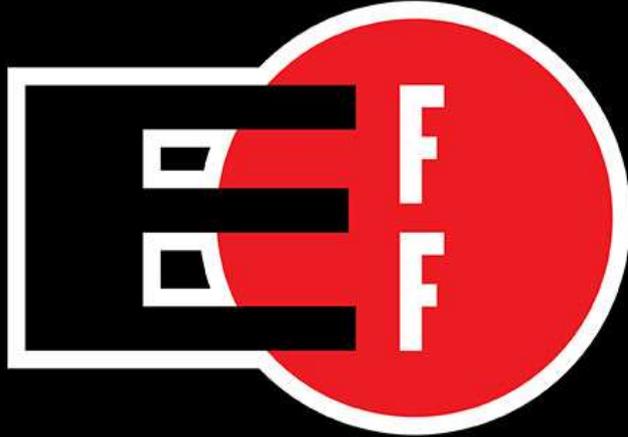


Image by Scoobay
CC BY-NC-SA 2.0

Introducing...

CRYPTO
PARTY

Privacy is necessary for an open society in the electronic age. Privacy is not secrecy. A private matter is something one doesn't want the whole world to know, but a secret matter is something one doesn't want anybody to know. Privacy is the power to selectively reveal oneself to the world. ~[Cypherpunk Manifesto](#)



THE CITIZEN LAB



RED CYBER

הצוות לחשיבה זדונית



One Million Security Professionals Needed!



Source : Cisco 2014 Annual Security Report



Image by Scoobay
CC BY-NC-SA 2.0





Image by R. Kikuo Johnson for NYT, September 2013

#5: THE FUD OF “CYBER” HAS TAKEN OVER

FEAR

UNCERTAINTY

DOUBT



Image: The Economist

Corbis/Alamy

Fight FUD With FACTS





MIND THE GAP

INFLUENCE THE INPUT





YOUR INTERNET NEEDS

YOU

**FIVE THINGS
WE CAN ALL DO
RIGHT NOW**



Y U NO ASK FOR PERMISSION



Research What Matters



Don't Keep Your Bugs To Yourself



Collaborate & Share



Empower The Masses

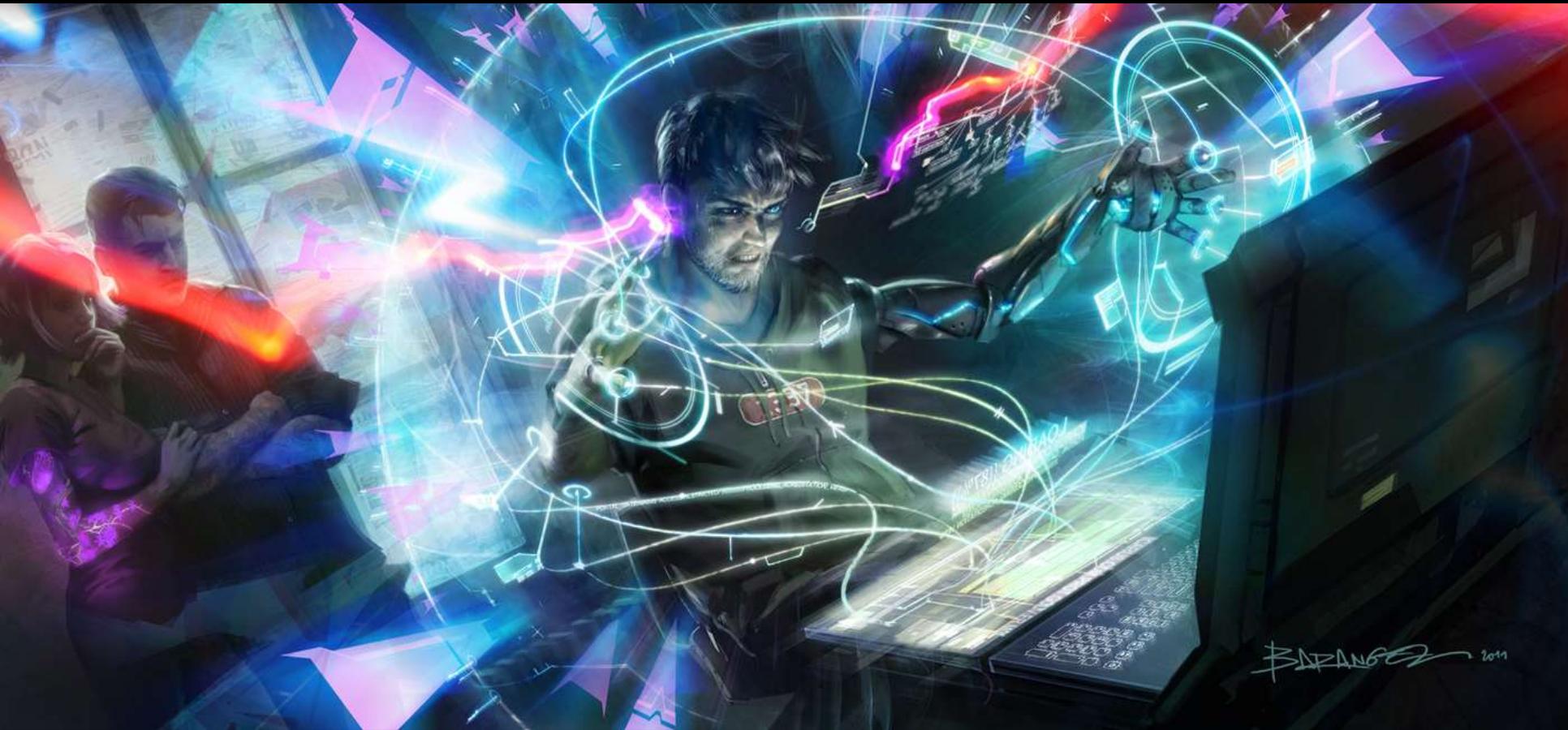


Stop The Spread Of FUD



I read your email





BARANGER 2011

Illustration by François Baranger

**Hacking is
Magic !**



A futuristic cityscape at night. In the foreground, a sleek, metallic flying car with glowing lights is in motion. To the right, a tall, modern skyscraper with a grid-like facade is illuminated. The background is filled with the lights of other buildings and a dark sky.

**WHAT DO YOU
CHOOSE
TO DO?**

@k3r3n3

