



INNOVATION



HACKING



FOSS

FOSS IS THE PHILOSOPHY AND
SUITE OF TECHNOLOGIES THAT
MAKE INNOVATION AND
LIBERTY POSSIBLE.

WHAT!

WHY?

EVENTS IN BLUE WING

BUILD YOUR OWN PC

ARDUINO BASICS

RASPBERRY PI W/BLUETOOTH

VISUAL TOUCH W/ARDUINO

PLAYING MARIO AGAINST [A] PYTHON

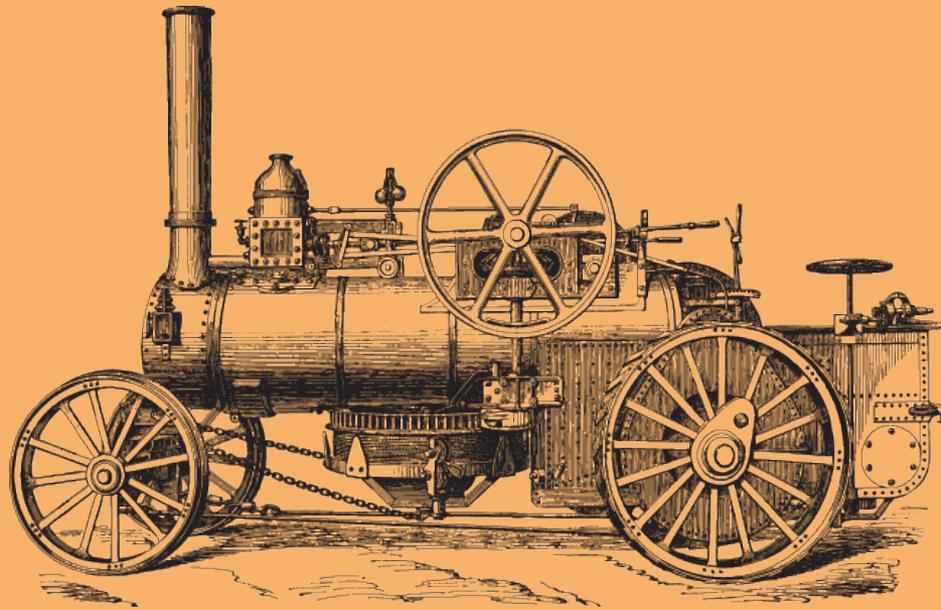
SQUISHY CIRCUIT

MAKEY MAKEY

SMART PHONE AD-HOC NETWORKING (SPAN)

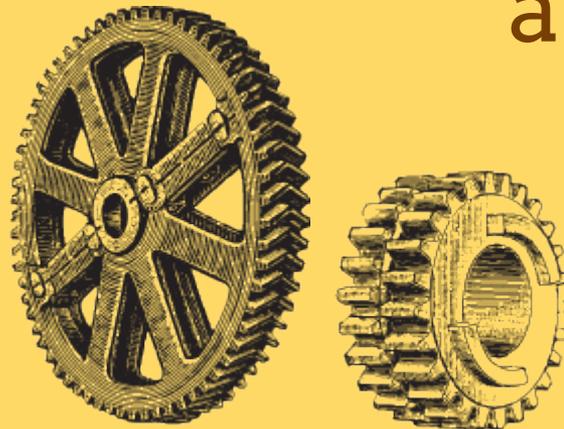
INNOVATION

The development of new solutions.



HACKING

Creating something
new from basic parts,
aka inventing.



HACKING

Deeply understanding
the details of a
technology in order to
regain individual
liberty.



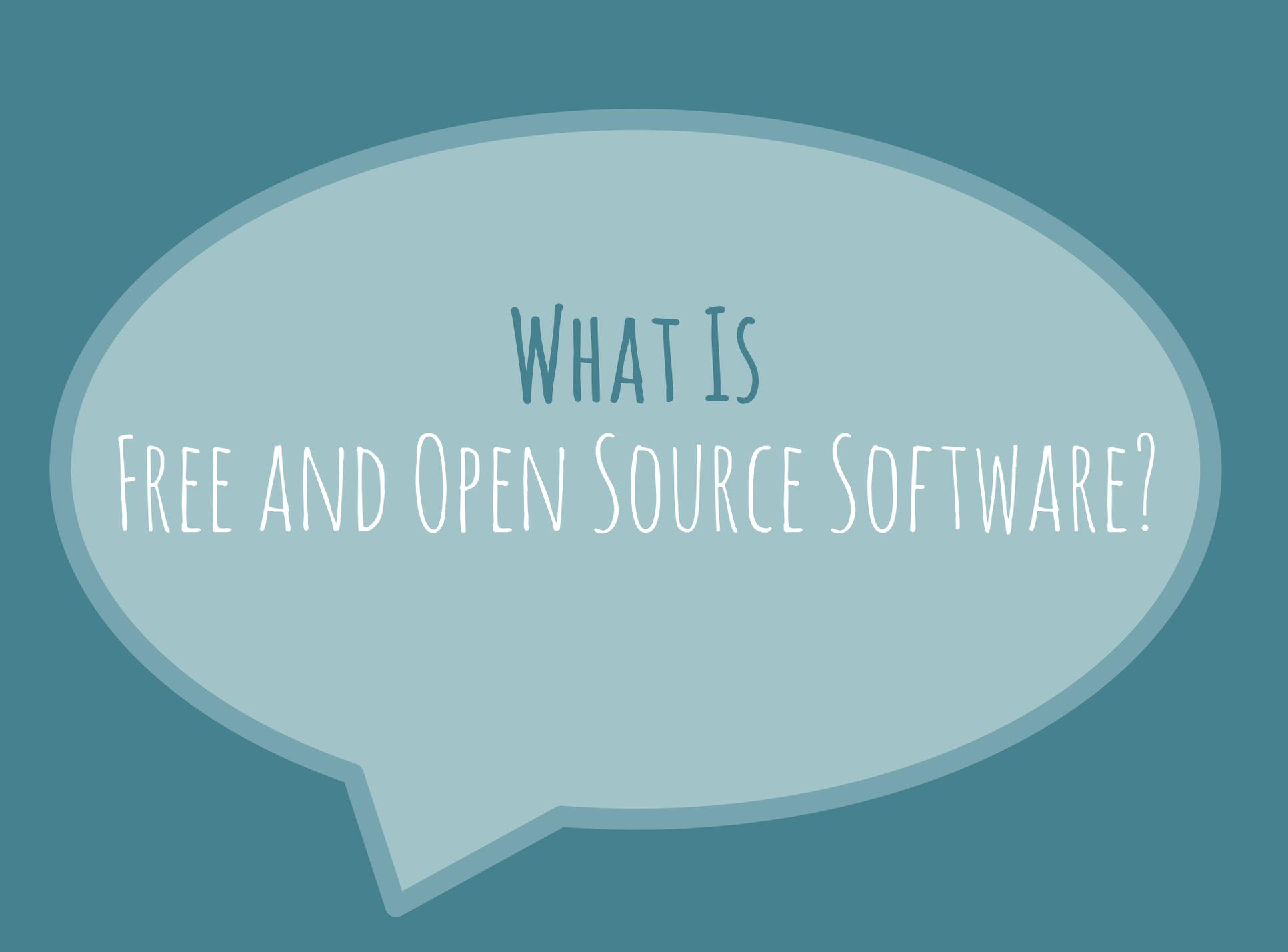
HACKING

phil·o·sophe [fil-uh-sof]

noun. public intellectuals dedicated to solving the real problems.



WHAT IS
FOSS?



WHAT IS
FREE AND OPEN SOURCE SOFTWARE?



FREE SOFTWARE
F O U N D A T I O N

free as in... **freedom**



FOSS is

A PHILOSOPHY

PRACTICAL

INDUSTRIAL

FOSS is

A PHILOSOPHY

Freedom to...
run the program
for any purpose

Freedom to...
study how the program works
& change it so it does
your computing **as you wish.**

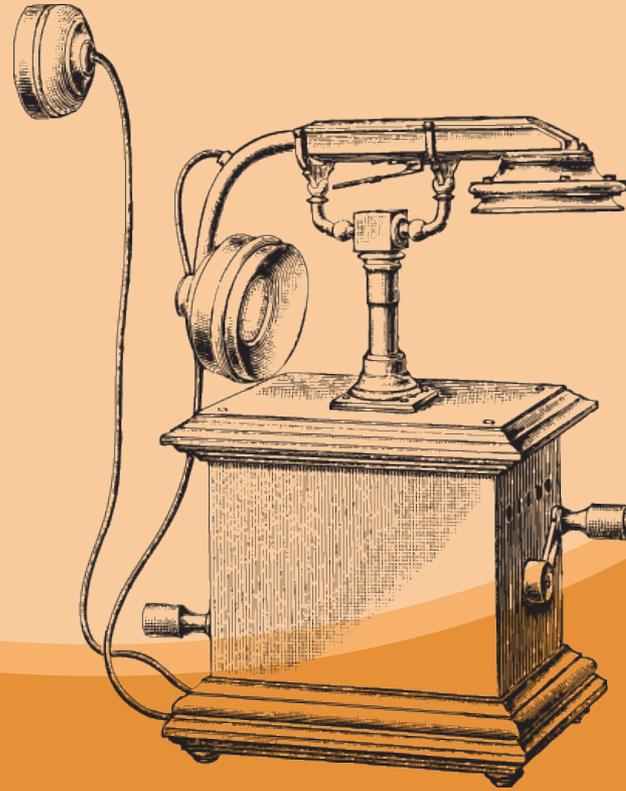
Access to the source code is a precondition for this.

Freedom to...
redistribute copies
so you can
help your neighbor.

Freedom to...
distribute copies of
your modified versions
to others.



WHY SHOULD YOU
CARE?



INSULAUDIT



Many
medical
devices
are
closed.

INSULAUDIT

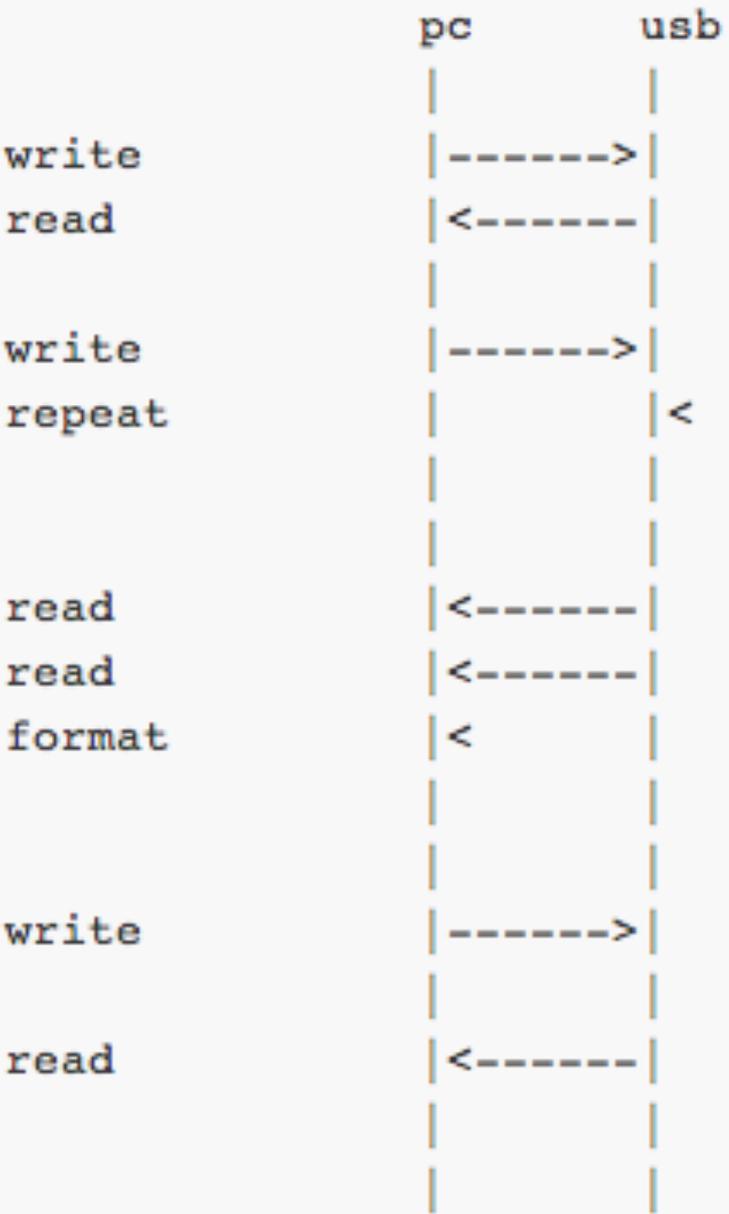


They Collect
information
about usage,
the patient,
& therapy.

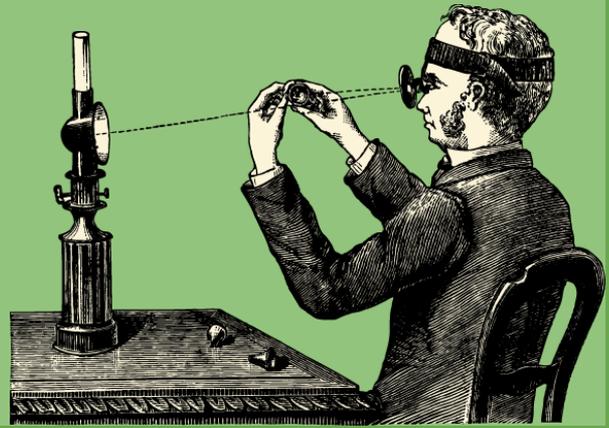
INSULAUDIT



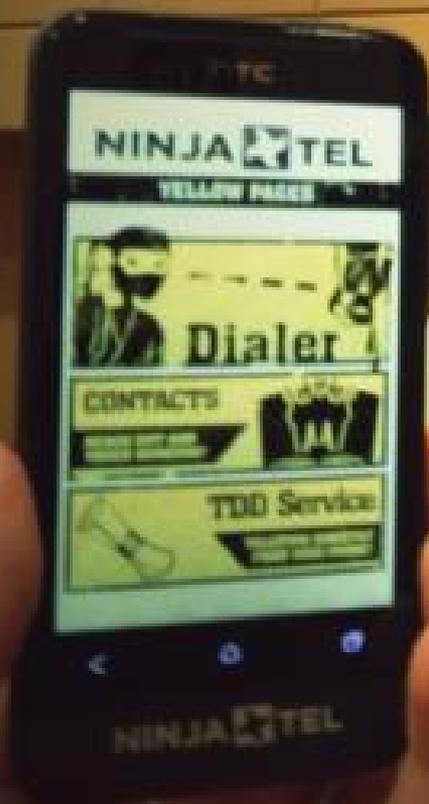
The patient has no legal rights to inspect any of this and are at the mercy of device manufacturers to get any information.



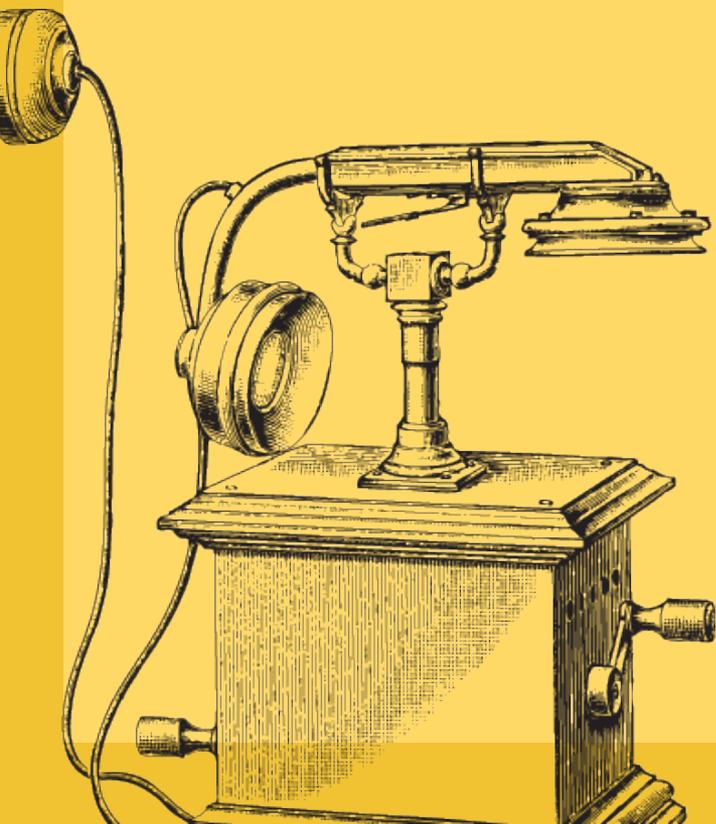
Engineers reverse engineering protocols



NinjaTel Private Hacker Cell Phone Network

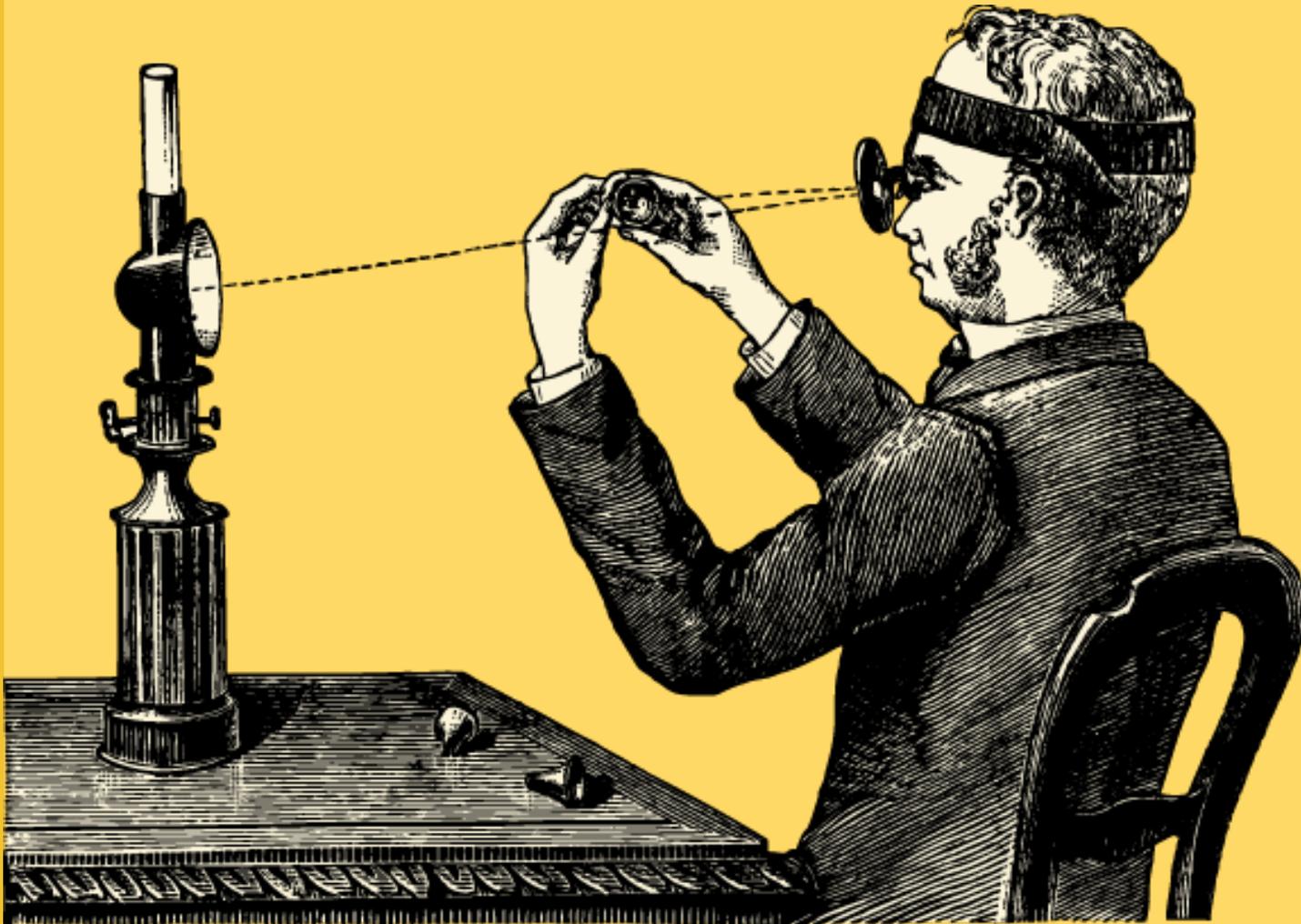


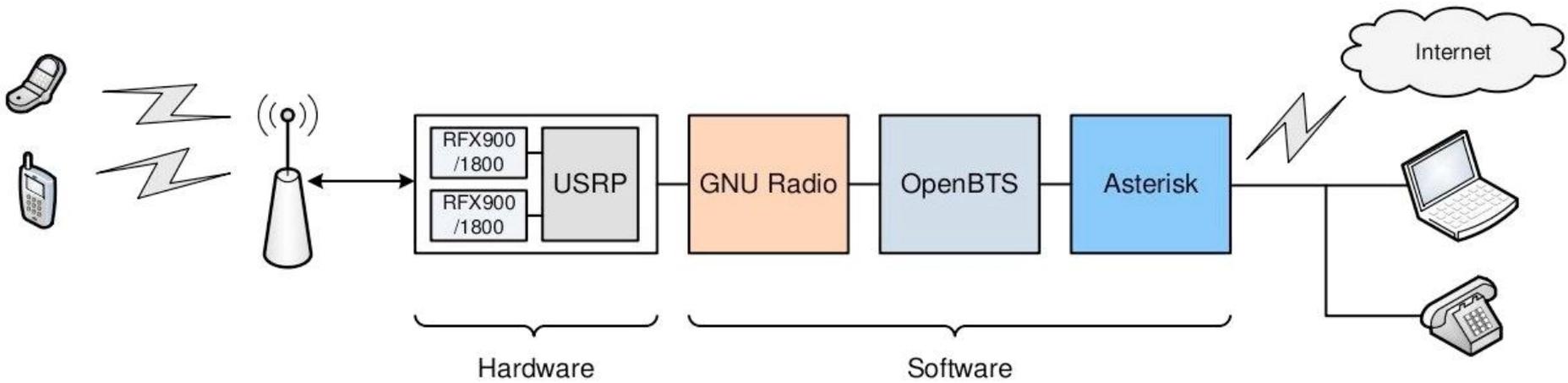
NinjaTel Private Hacker Cell Phone Network



Used/created FOSS
to build network

How would someone do it?

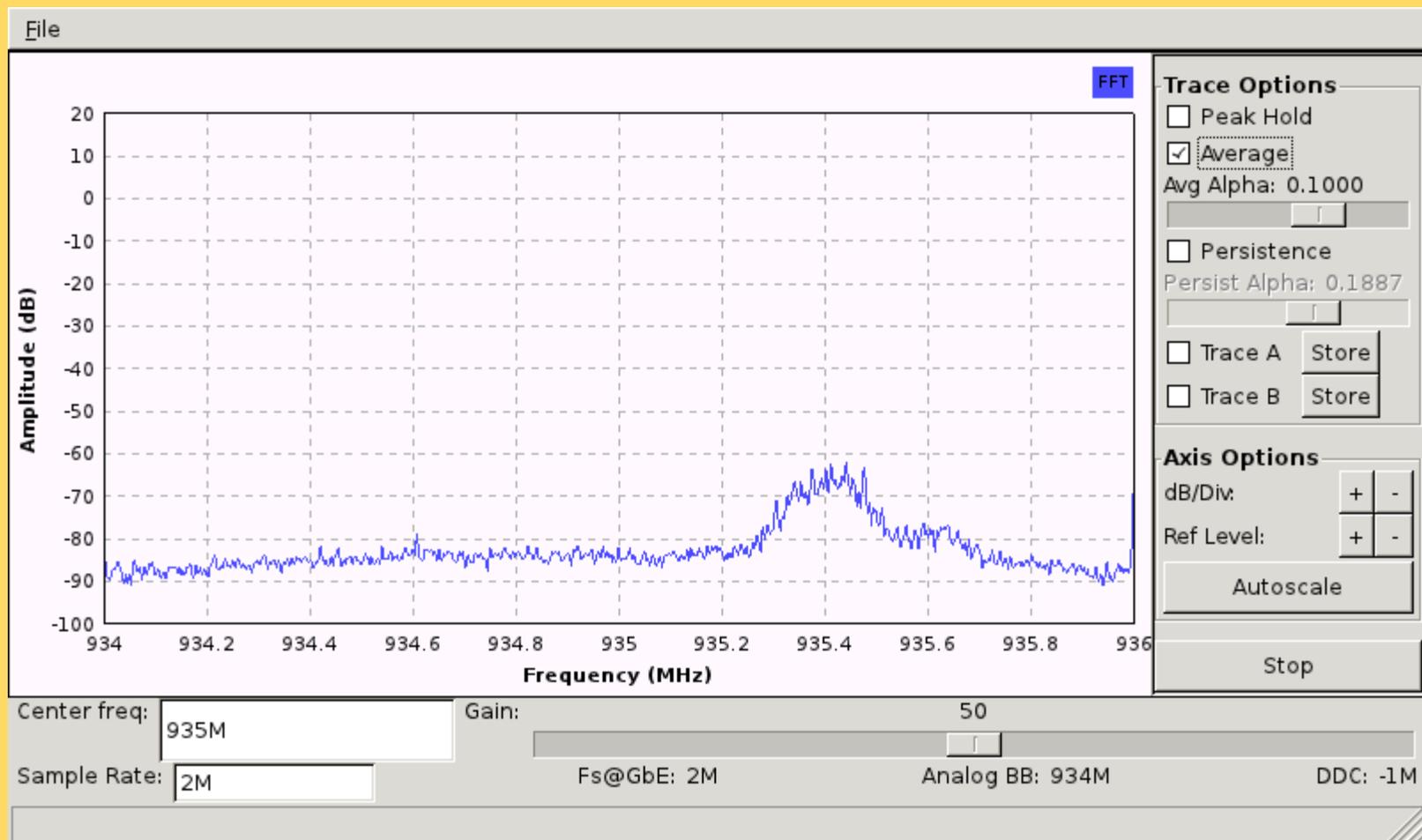






USRP Base Station

GNU Radio)))



```
voip*CLI>
```

```
-- Executing Set(
```

```
-- Channel will ha
```

```
-- Executing Dial
```

```
-- SS7 request (SS7/777351056/
```

```
-- SS7 channel SS7/777351056 allo
```

```
-- Called 777351056
```

```
-- SS7/siuc/6 is ringing
```

```
-- SS7/siuc/6 is making progress
```

```
-- SS7/siuc/6 answered SIP/rudinsl
```

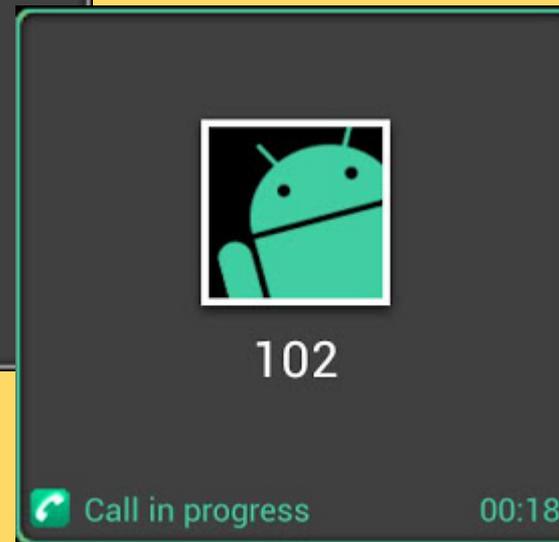
```
-- SS7 hangup 'SS7/siuc/6' CIC=6
```

```
== Spawn extension (SS7_outgoing, 7
```

```
voip*CLI> █
```



SipDroid (VOIP CLIENT)



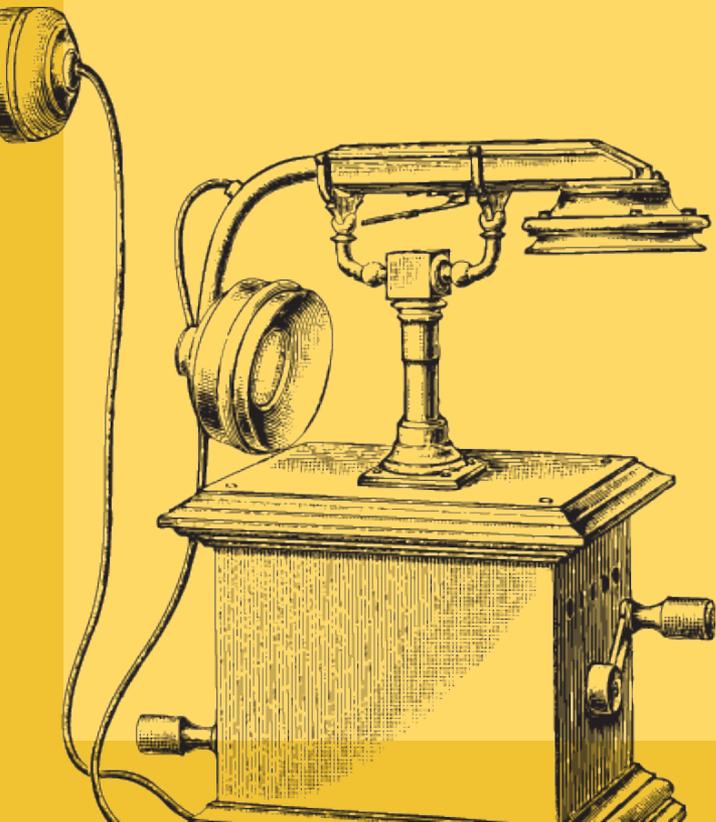




TELEPHONE

NinjaTel Private Hacker Cell Phone Network

Still can't afford
federal permits for
airwaves :(



Unlocking your own hardware



LIBERTY TO DO
ANYTHING YOU WANT
WITH WHAT YOU OWN



SONY PREVENTS YOU FROM PLAYING
YOUR OWN GAMES AND EVEN TALKING
ABOUT HOW TO PLAY YOUR OWN GAMES

```
erk: C0 CE FE 84 C2 27 F7 5B D0 7A 7E B8 46 50 9F
riv: 47 EE 74 54 E4 77 4C C9 B8 96 0C 7B 59 F4 C1
pub: C2 D4 AA F3 19 35 50 19 AF 99 D4 4E 2B 58 CA
  R: 80 6E 07 8F A1 52 97 90 CE 1A AE 02 BA DD 6F
  n: E1 3A 7E BC 3A CC EB 1C B5 6C C8 60 FC AB DB
  K: BA 90 55 91 68 61 B9 77 ED CB ED 92 00 50 92
Da: C5 B2 BF A1 A4 13 DD 16 F2 6D 31 C0 F2 ED 47
```

~geohot

props to fail0verflow for the asymmetric half
no donate link, just use this info wisely
i do not condone piracy

APPLE PREVENTS YOU FROM
RUNNING WHATEVER YOU
WANT ON YOUR OWN PHONE



TO REGAIN LIBERTY

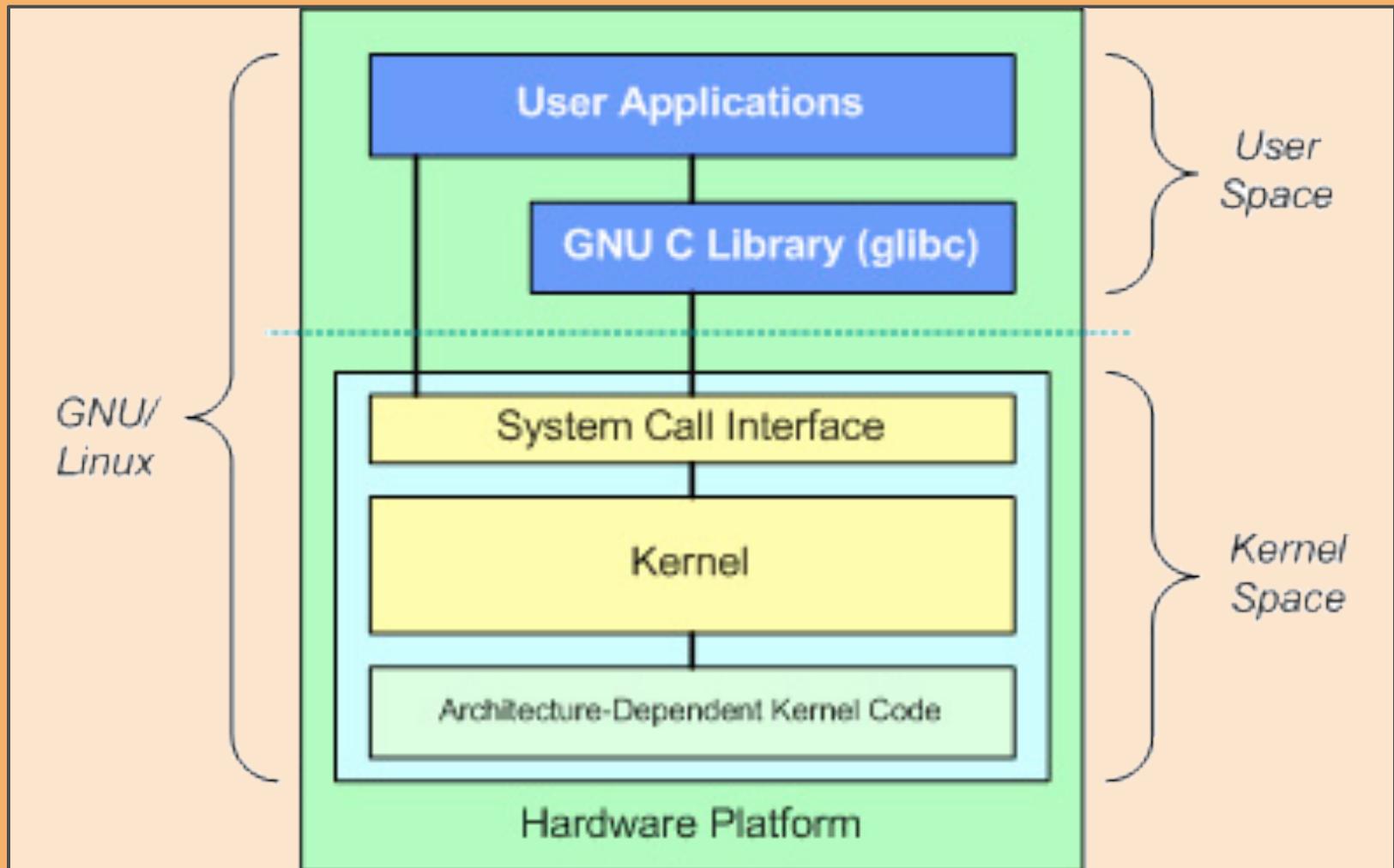
BREAK INTO
DEVICES

-OR-

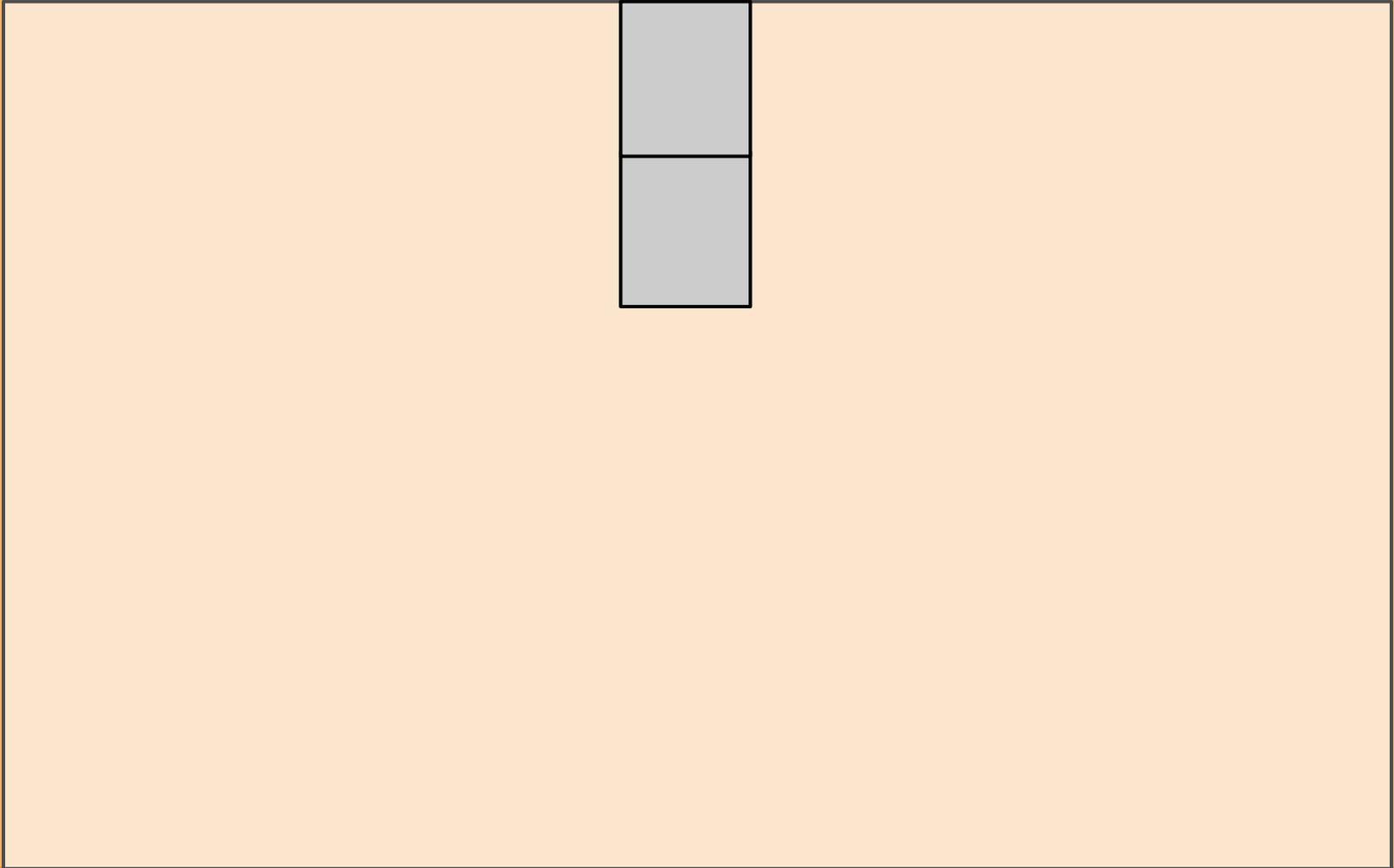
BUY HARDWARE
THAT RESPECTS
YOU



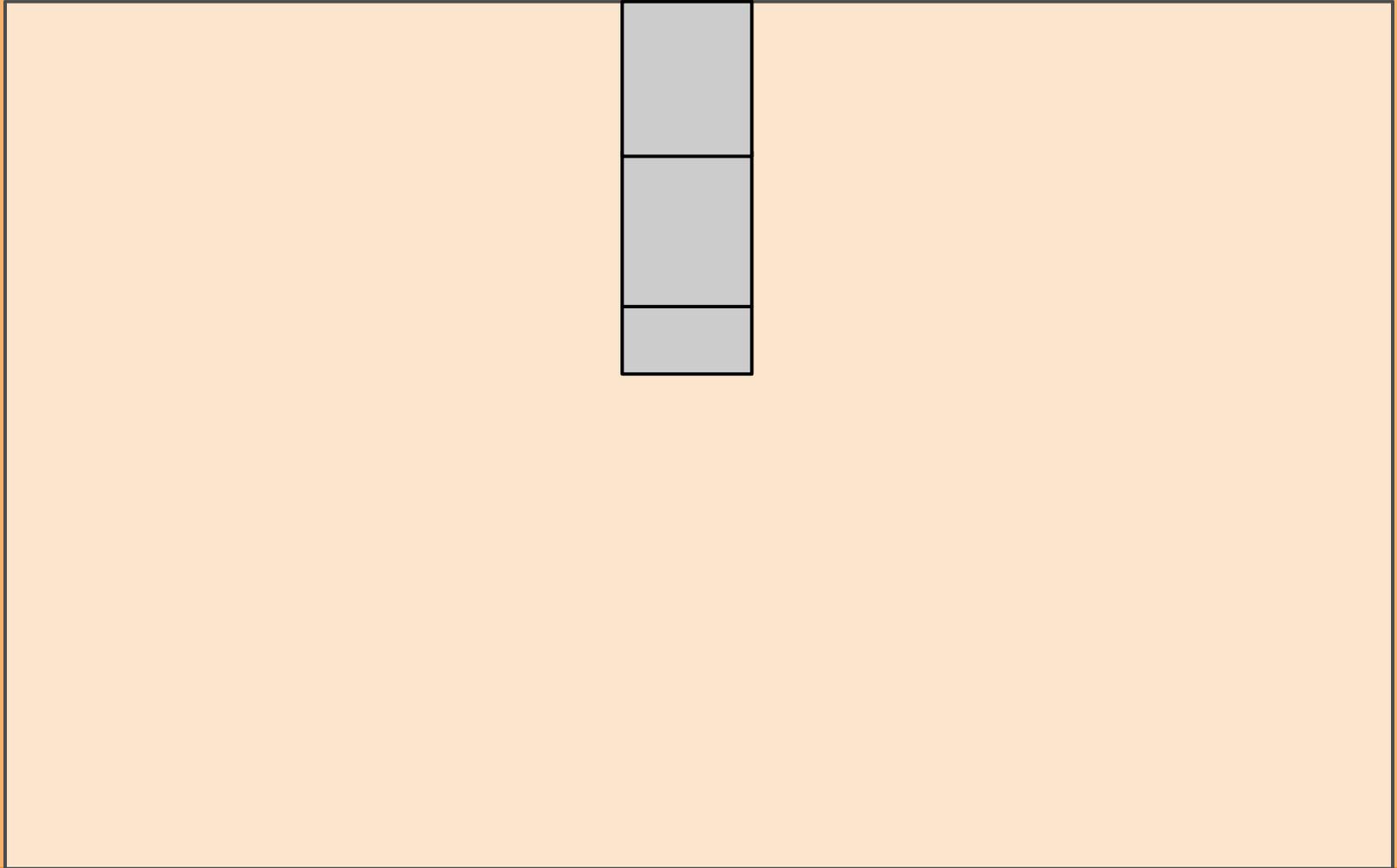
ANATOMY OF MOST DEVICES



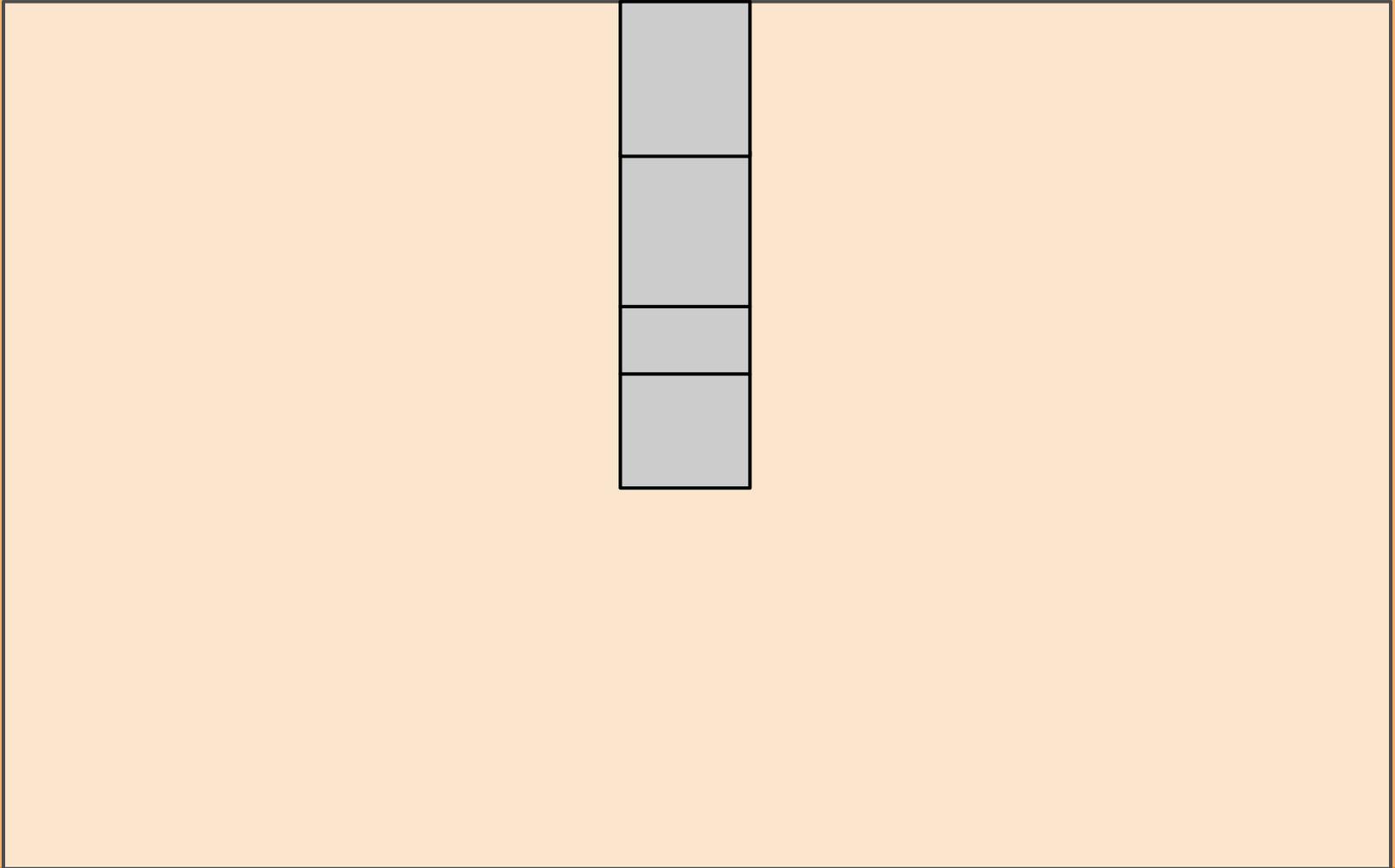
PROCESS STACK



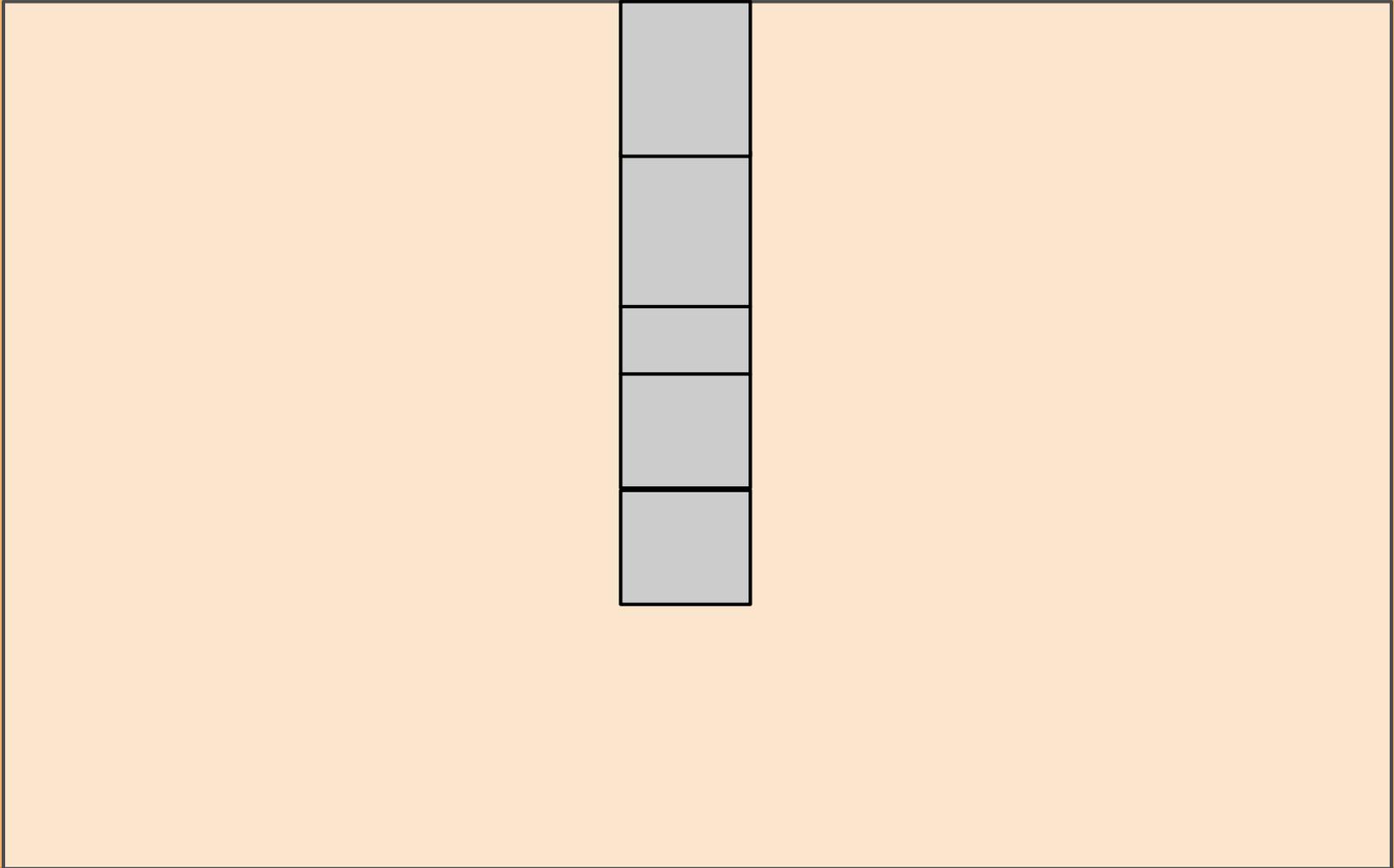
PROCESS STACK



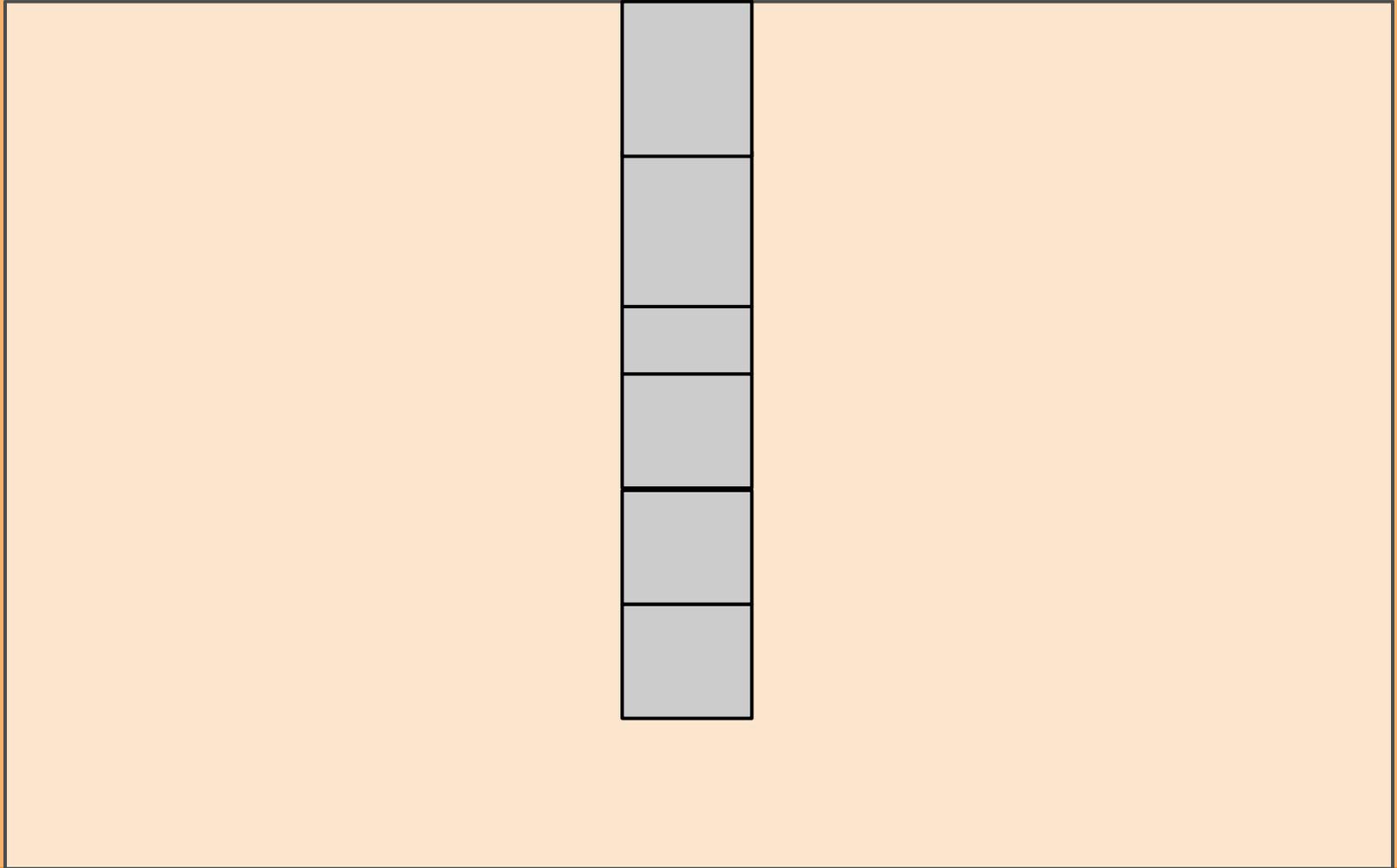
PROCESS STACK

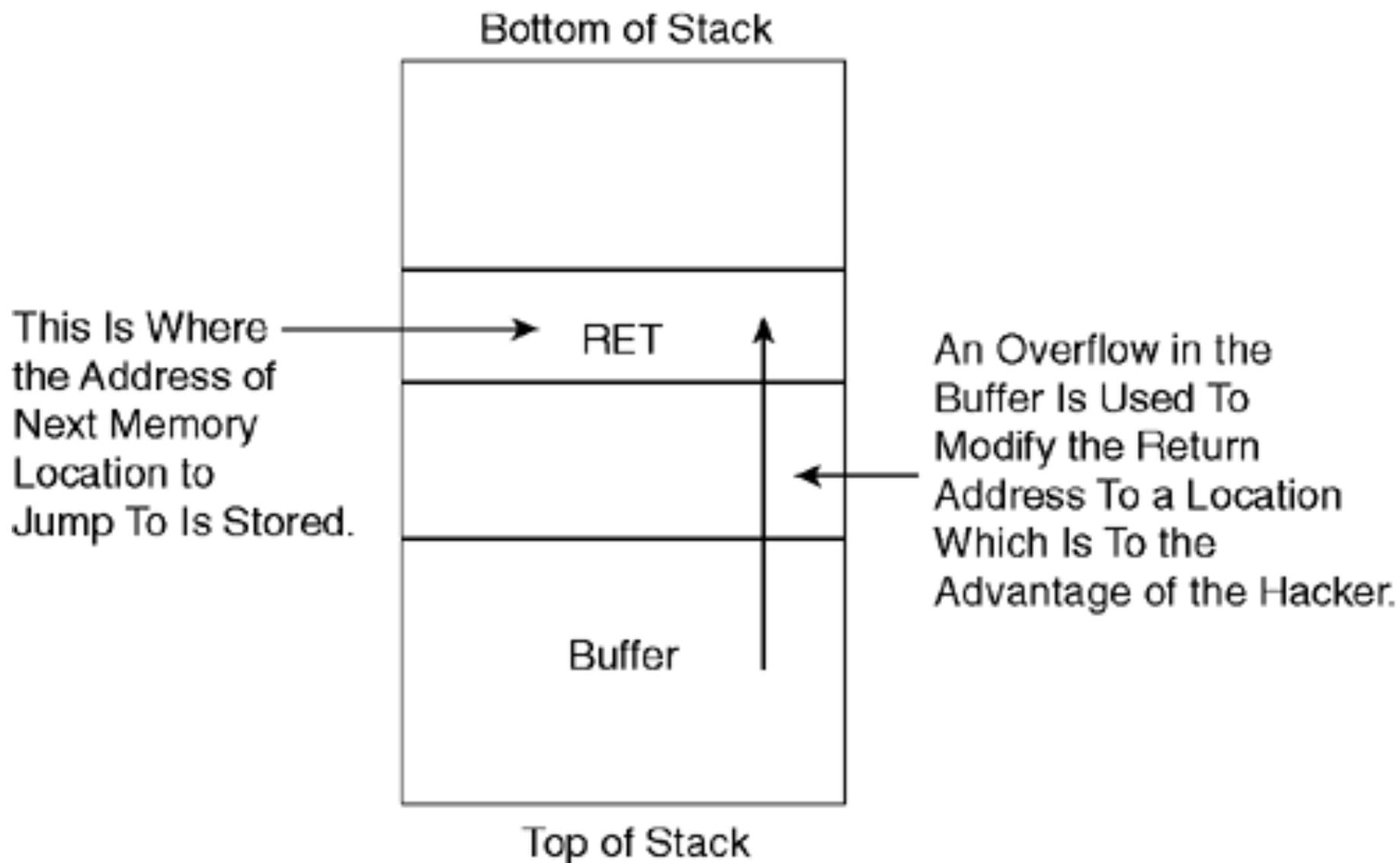


PROCESS STACK



PROCESS STACK





```

08048e1c <main>:
8048e1c:    55                push   %ebp
8048e1d:    89 e5            mov    %esp,%ebp
8048e1f:    83 e4 f0        and    $0xffffffff0,%esp
8048e22:    83 ec 50        sub    $0x50,%esp
8048e25:    8d 44 24 24     lea   0x24(%esp),%eax
8048e29:    89 04 24        mov    %eax,(%esp)
8048e2c:    e8 2b fa ff ff  call   804885c <pipe@plt>
8048e31:    c7 44 24 08 00 00 00  movl   $0x0,0x8(%esp)
8048e38:    00
8048e39:    c7 44 24 04 02 00 00  movl   $0x2,0x4(%esp)
8048e40:    00
8048e41:    c7 04 24 13 00 00 00  movl   $0x13,(%esp)
8048e48:    e8 4f f9 ff ff  call   804879c <socket@plt>
8048e4d:    89 44 24 2c     mov    %eax,0x2c(%esp)
8048e51:    c7 44 24 04 00 00 00  movl   $0x0,0x4(%esp)
8048e58:    00
8048e59:    c7 04 24 1a 92 04 08  movl   $0x804921a,(%esp)
8048e60:    e8 67 f8 ff ff  call   80486cc <open@plt>
8048e65:    89 44 24 30     mov    %eax,0x30(%esp)
8048e69:    8b 44 24 24     mov    0x24(%esp),%eax
8048e6d:    85 c0          test   %eax,%eax
8048e6f:    78 18         js     8048e89 <main+0x6d>
8048e71:    8b 44 24 28     mov    0x28(%esp),%eax
8048e75:    85 c0          test   %eax,%eax
8048e77:    78 10         js     8048e89 <main+0x6d>
8048e79:    8b 44 24 2c     mov    0x2c(%esp),%eax
8048e7d:    85 c0          test   %eax,%eax
8048e7f:    78 08         js     8048e89 <main+0x6d>
8048e81:    8b 44 24 30     mov    0x30(%esp),%eax
8048e85:    85 c0          test   %eax,%eax
8048e87:    79 16         jns   8048e9f <main+0x83>
8048e89:    c7 04 24 24 92 04 08  movl   $0x8049224,(%esp)
8048e90:    e8 a7 f9 ff ff  call   804883c <puts@plt>

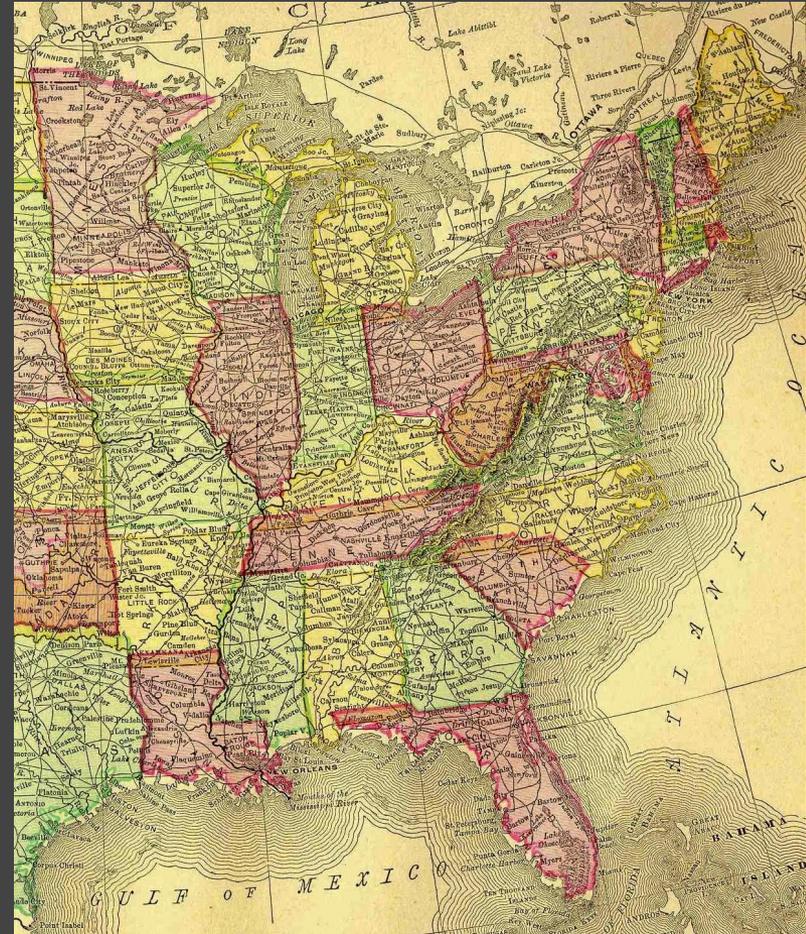
```

Internet Freedom



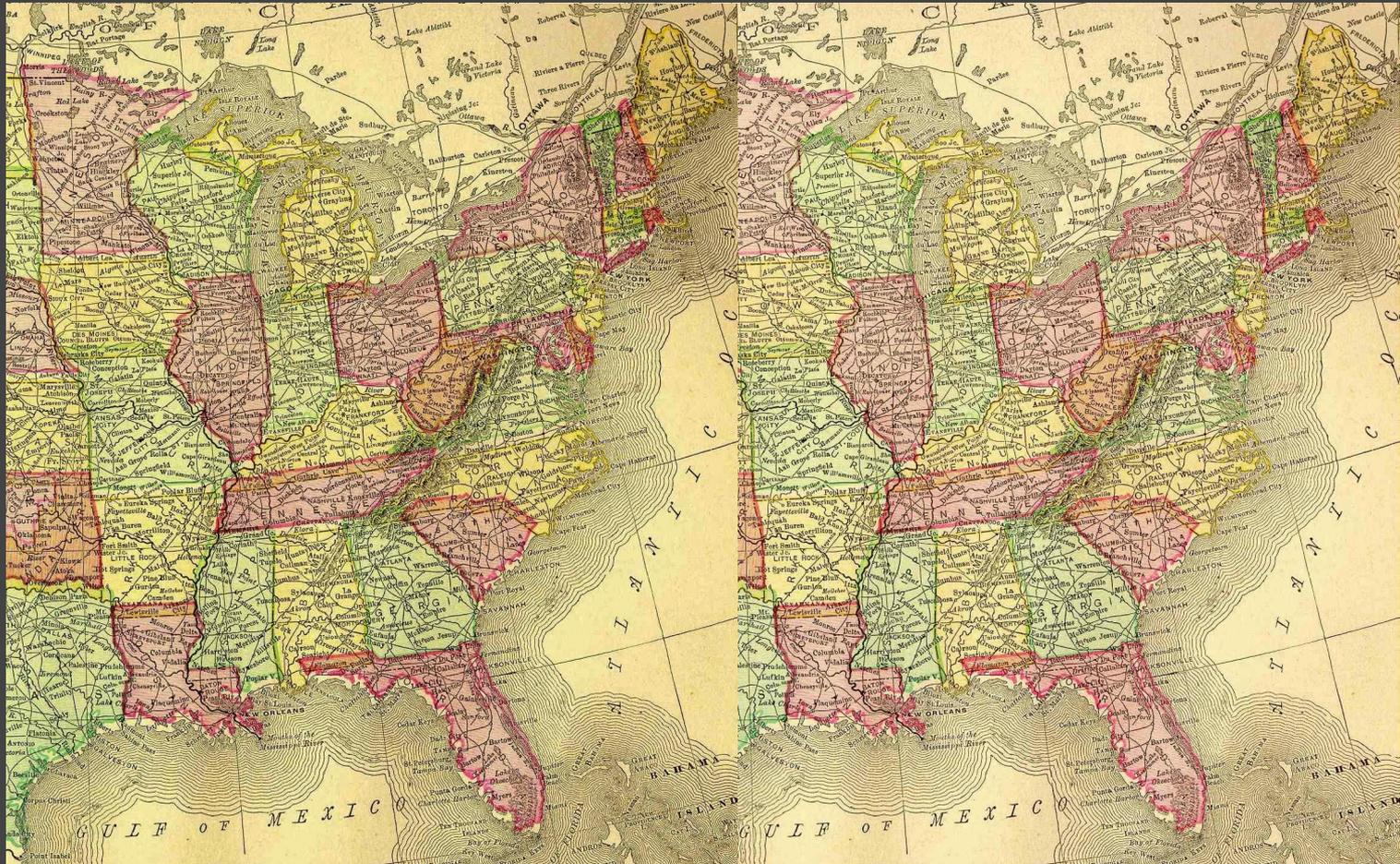
PHYSICAL WORLD

↓ INTERNET



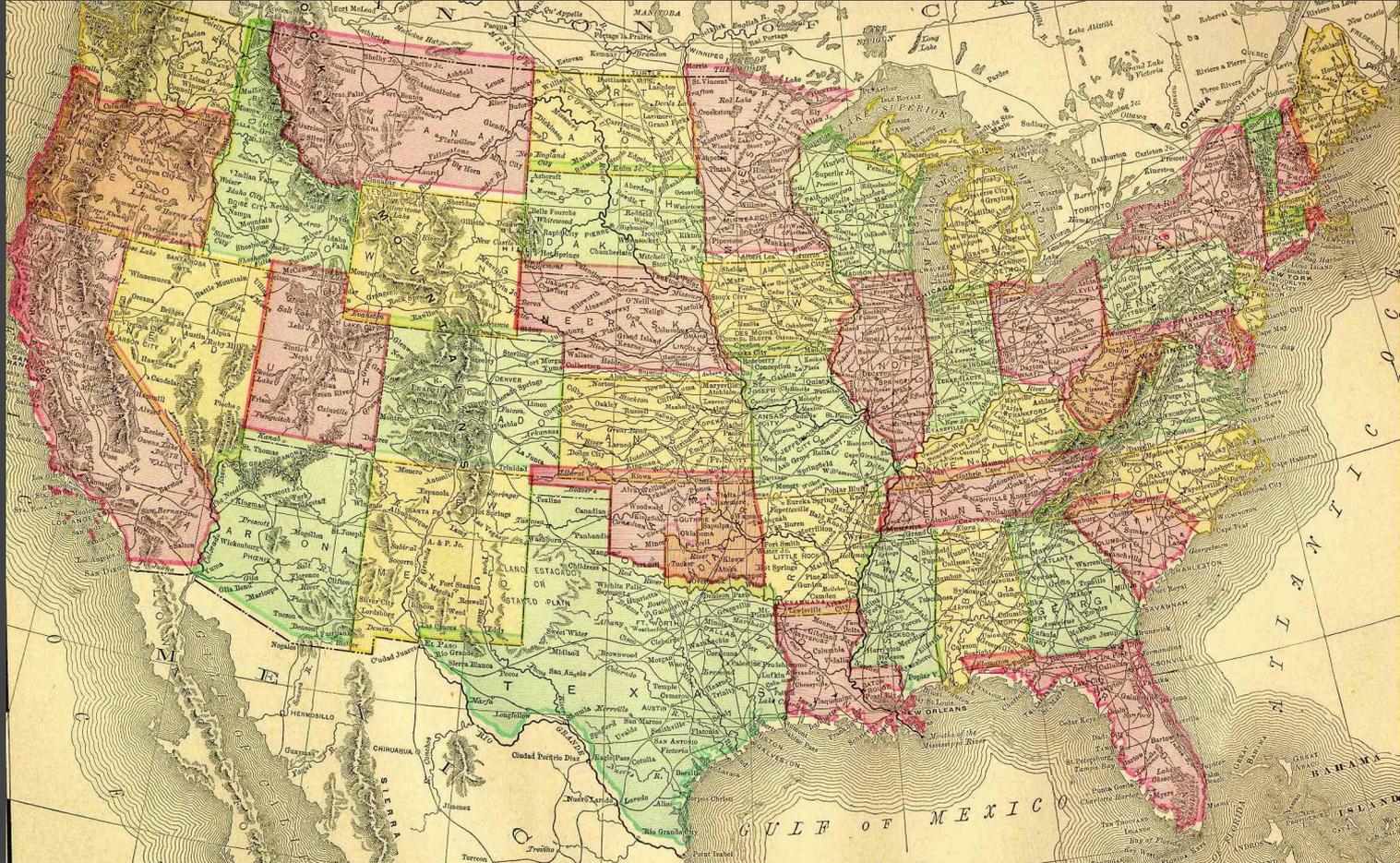
PHYSICAL WORLD

↓
INTERNET



PHYSICAL WORLD

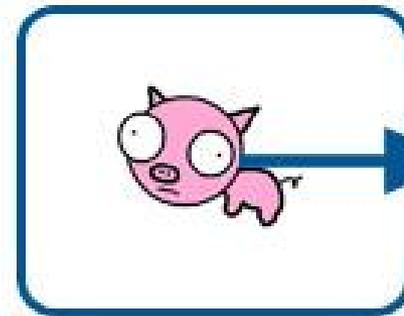
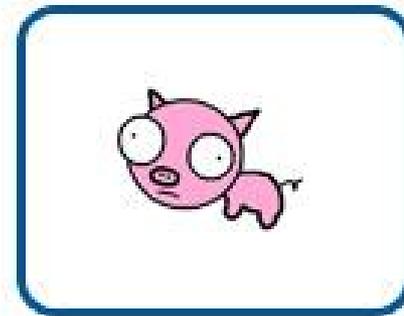
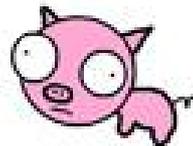
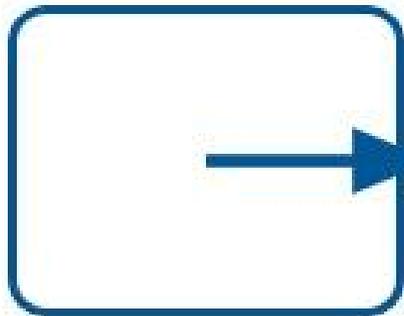
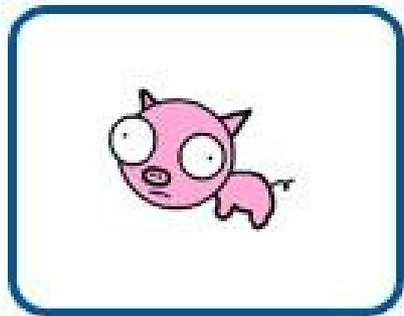
↓
INTERNET
↓



Piracy is not theft.

It's piracy.

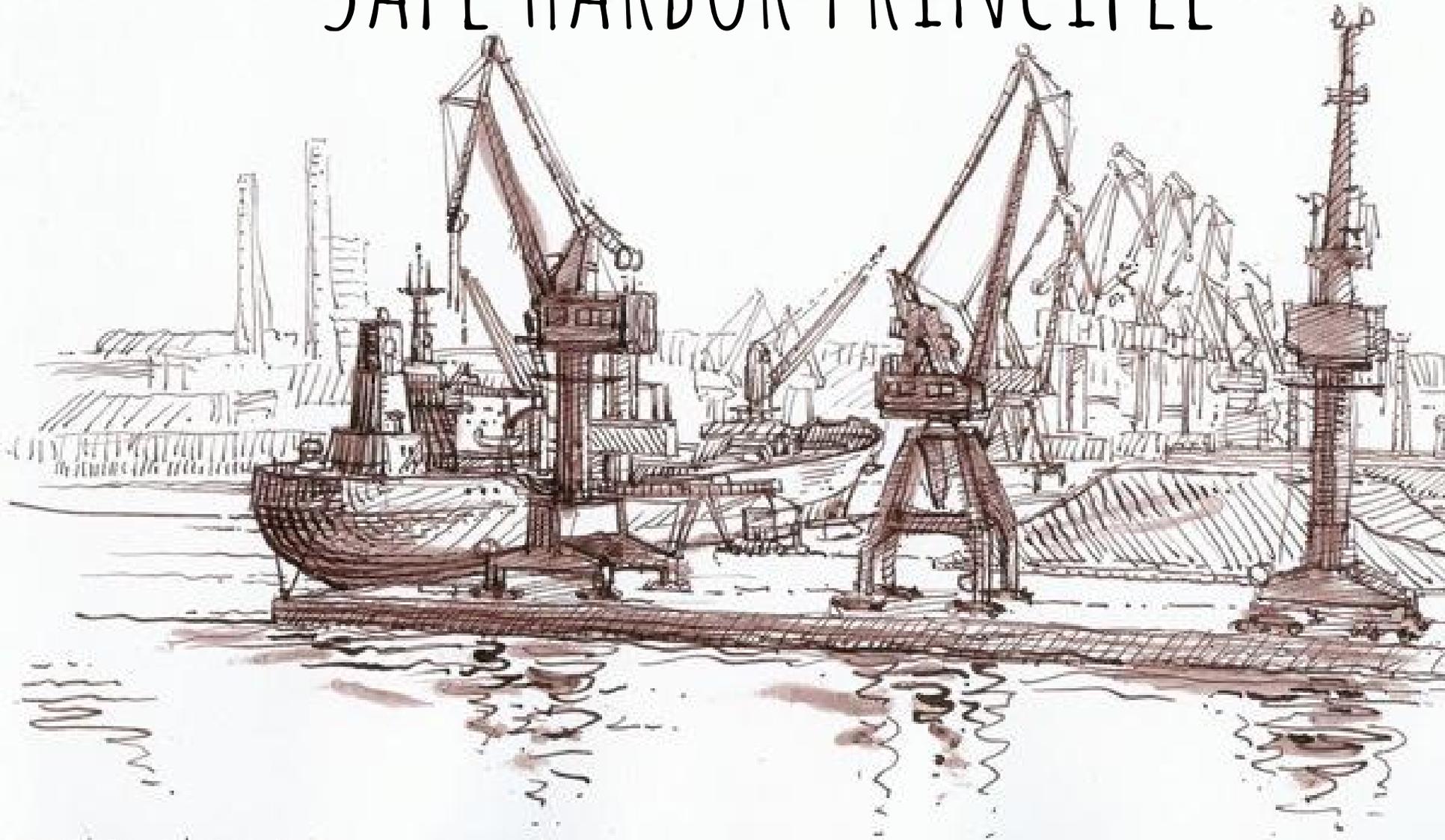
(a handy guide)



Theft removes the original

Piracy makes a copy

SAFE HARBOR PRINCIPLE



SOPA

PIPA

“SEC. 105. IMMUNITY FOR TAKING
VOLUNTARY ACTION AGAINST SITES
THAT ENDANGER PUBLIC HEALTH” -

SOPA

“SEC. 105. IMMUNITY FOR TAKING
VOLUNTARY ACTION AGAINST SITES
THAT ENDANGER PUBLIC HEALTH” -

STOP ONLINE PIRACY ACT

“SEC. 105. IMMUNITY FOR TAKING
VOLUNTARY ACTION AGAINST SITES
THAT ENDANGER PUBLIC HEALTH” –
STOP ONLINE PIRACY ACT

her like nate ing towards online actly w companies er provisions Rep institutions SOPA/PIPA House bills Online business US-based dedicated OPEN instances including websites sites

dislike worry block proven chance achieved good abuse provision intellectual Bill part take paying illegal differences access Actbill foreign potential sponsor physical seems important Boing piracy DNS action support found

blockage worry proven chance achieved good abuse provision intellectual Bill part take paying illegal differences access Actbill foreign potential sponsor physical seems important Boing piracy DNS action support found

chief much legislation holders unfair essentially attempt ISPs make copyright law critics Internet

consensus section imports experts advertisers becoming infringing meaningless new users number American interpreted

bring

pieces Lamar Google Trade highly Digital places

likely sever however

site enforcement meaning enforcement powers anti-piracy risk

Reid unlikely R-TX

Majority

STOP

VOTE NO ON
SOPA

INTERNET

CENSORSHIP

FOR FREE INTERNET



STOP

SOPA/PIPA



1.



2.



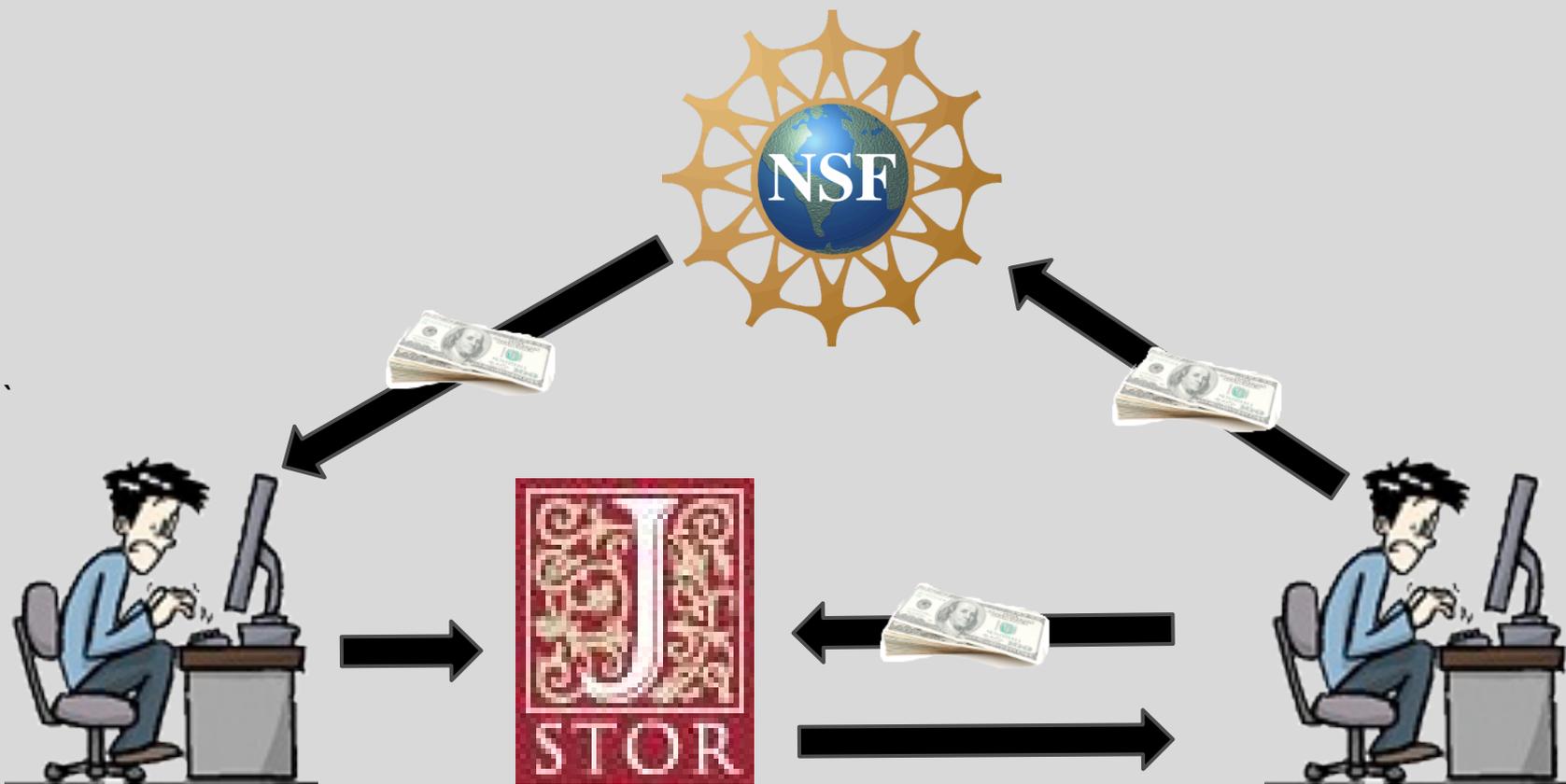
3.

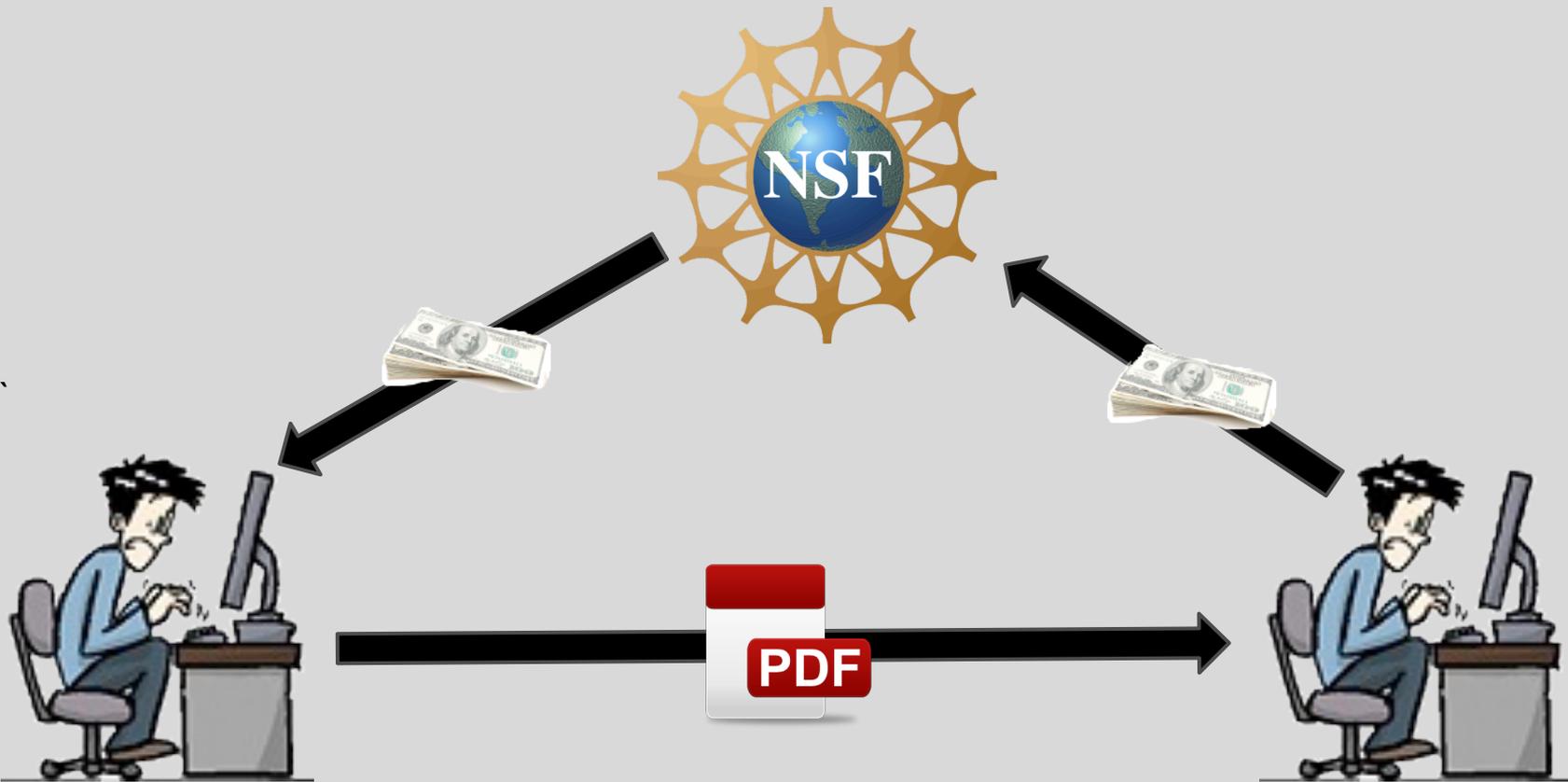


RECENT DEBATE

(BY THE PEOPLE, NOT OUR CONGRESS)

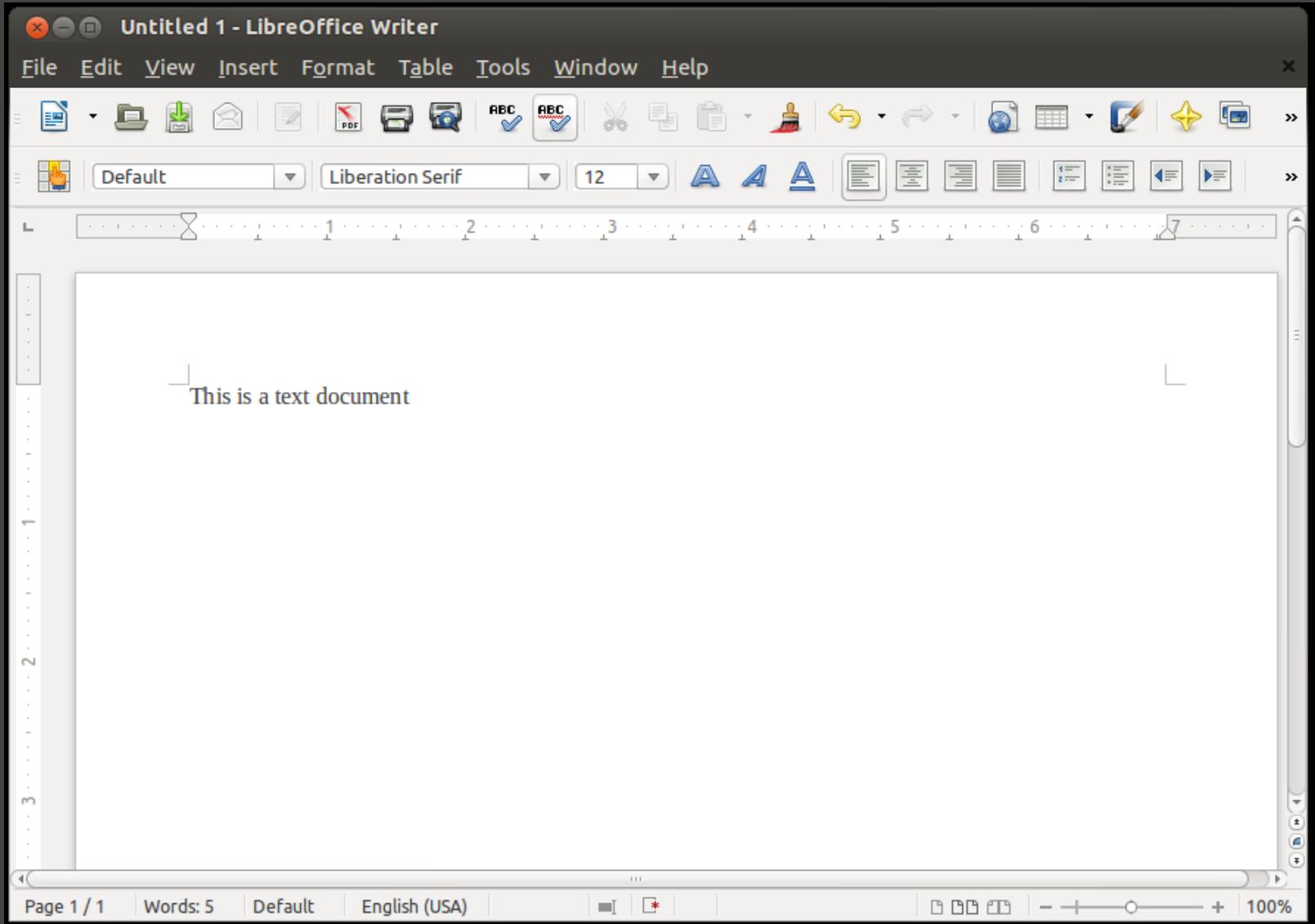
SHOULD PUBLICLY FUNDED RESEARCH
BE SOLD BY PRIVATE COMPANIES?





FOSS is

PRACTICAL



Untitled 1 - LibreOffice Calc

File Edit View Insert Format Tools Data Window Help

Liberation Sans 10

A1

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
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16									
17									
18									
19									
20									

Sheet1

Sheet 1 / 1 Default Sum=0 100%

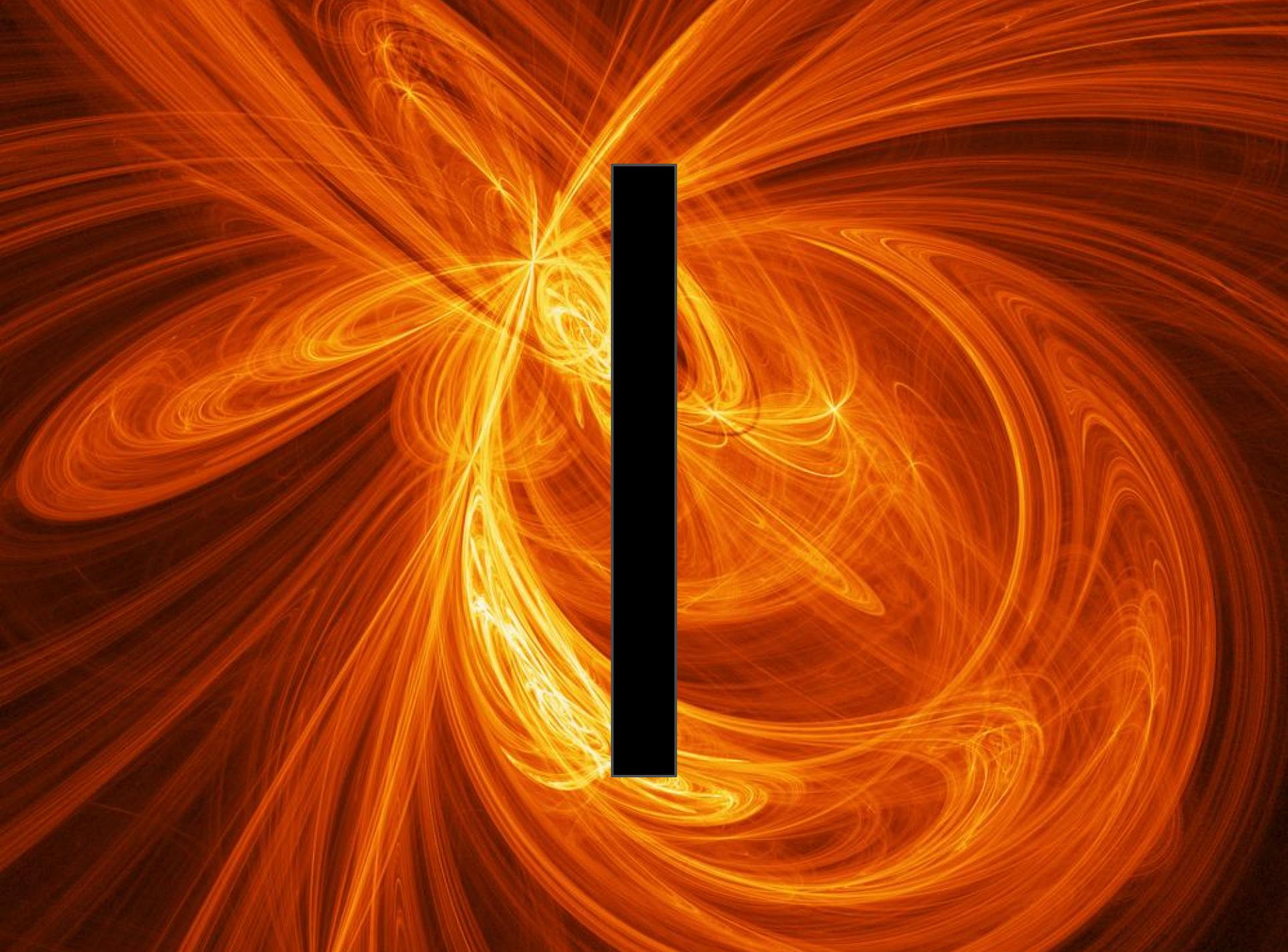
Bash Terminal



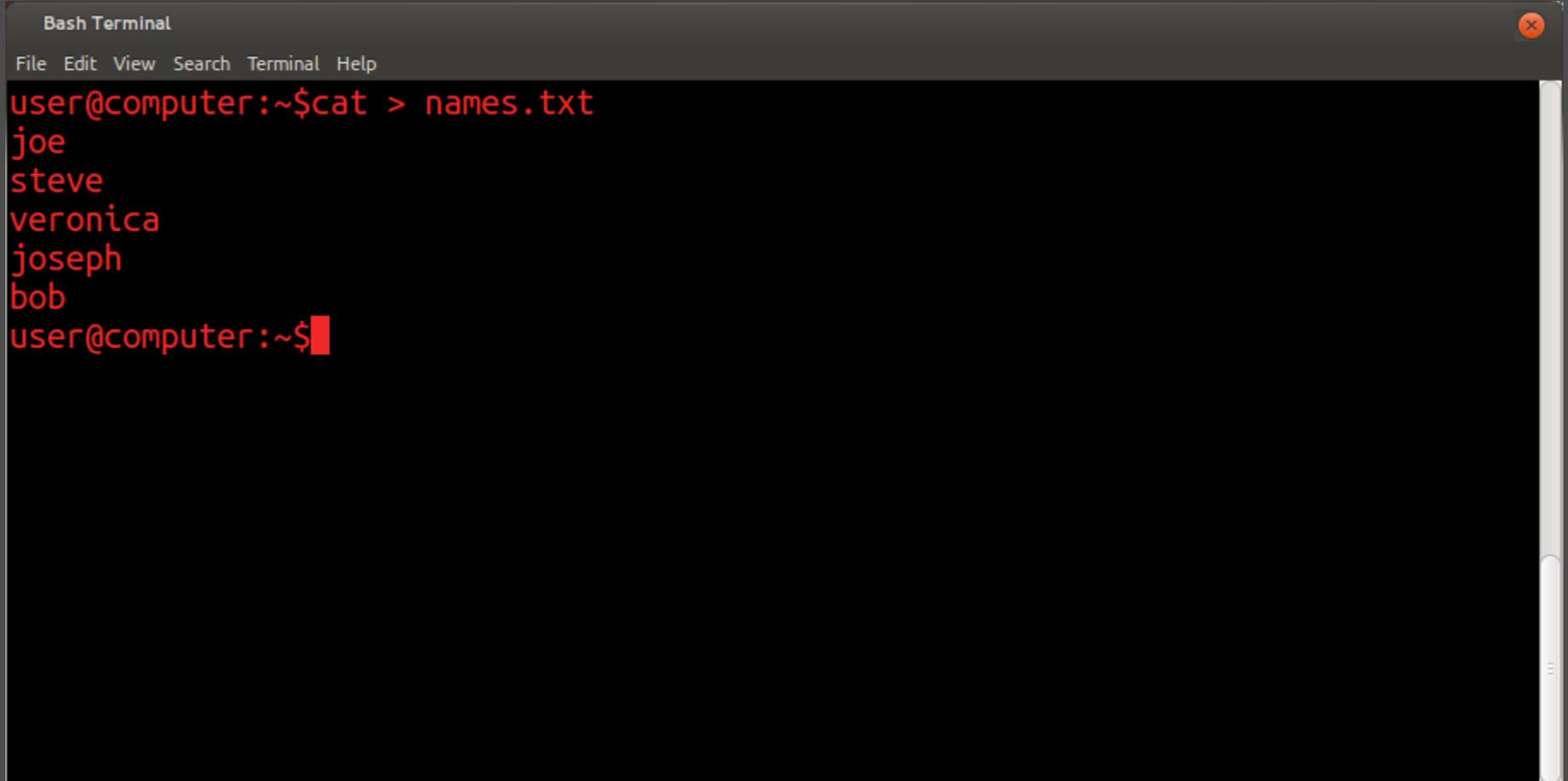
File Edit View Search Terminal Help

user@computer:~\$

Text-based lets you
do more by letting you
automate tasks.



Example pipes:



```
Bash Terminal
File Edit View Search Terminal Help
user@computer:~$cat > names.txt
joe
steve
veronica
joseph
bob
user@computer:~$
```

The image shows a terminal window titled "Bash Terminal" with a menu bar containing "File", "Edit", "View", "Search", "Terminal", and "Help". The terminal content shows a user at a computer prompt (~\$) running the command "cat > names.txt". The output of the command is a list of names: "joe", "steve", "veronica", "joseph", and "bob". The prompt returns to "user@computer:~\$" with a red cursor.

Example pipes:

```
Bash Terminal
File Edit View Search Terminal Help
user@computer:~$cat names.txt
joe
steve
veronica
joseph
bob
user@computer:~$
```

Example pipes:

```
Bash Terminal
File Edit View Search Terminal Help
user@computer:~$cat names.txt | grep j
joe
joseph
user@computer:~$
```

Example pipes:

```
Bash Terminal
File Edit View Search Terminal Help
user@computer:~$cat names.txt | grep j
joe
joseph
user@computer:~$cat names.txt | grep v
steve
veronica
user@computer:~$
```

Example pipes:

```
Bash Terminal
File Edit View Search Terminal Help
user@computer:~$cat names.txt | grep j
joe
joseph
user@computer:~$cat names.txt | grep v
steve
veronica
user@computer:~$cat names.txt | grep ver
veronica
user@computer:~$
```

Example pipes:

```
Bash Terminal
File Edit View Search Terminal Help
user@computer:~$cat names.txt | grep j
joe
joseph
user@computer:~$cat names.txt | grep v
steve
veronica
user@computer:~$cat names.txt | grep ver
veronica
user@computer:~$cat names.txt | grep -v j
steve
veronica
bob
user@computer:~$
```







Cornell University
Library

arXiv.org

Open access to 816,200 e-prints in Physics, Mathematics, Computer

Subject search and browse:

19 Oct 2012: [arXiv Holiday Schedule](#)

29 Aug 2012: [Simons Foundation funds new arXiv sustainability mod](#)

See cumulative "What's New" pages. Read [robots beware](#) before atte

arXiv (Archive)

Open access to research papers



Algebraic Geometry

New submissions

Submissions received from Tue 22 Jan 13 to Wed 23 Jan 13, announced Thu, 24 Jan 13

- [New submissions](#)
- [Cross-lists](#)
- [Replacements](#)

[total of 22 entries: [1-22](#)]

[showing up to 2000 entries per page: [fewer](#) | [more](#)]

New submissions for Thu, 24 Jan 13

[1] [arXiv:1301.5410](#) [[pdf](#), [ps](#), [other](#)]

Cancellativization of dimer models

[Charlie Beil](#), [Akira Ishii](#), [Kazushi Ueda](#)

Comments: 16 pages, 17 figures

Subjects: **Algebraic Geometry (math.AG)**

We show that any dimer model can be made cancellative without changing

[2] [arXiv:1301.5430](#) [[pdf](#), [ps](#), [other](#)]

Del Pezzo Surfaces in Weighted Projective Spaces

[Erik Paemurru](#)

Comments: 25 pages

Subjects: **Algebraic Geometry (math.AG)**; **Differential Geometry (math.DG)**

We study singular del Pezzo surfaces that are quasi-smooth and well-form

[3] [arXiv:1301.5436](#) [[pdf](#), [ps](#), [other](#)]

Horrocks Correspondence on a Quadric Surface

[F. Malaspina](#), [A. P. Rao](#)

<http://arxiv.org/list/math.AG/new>

```
79 </dd>
80 <dt><a name="item2">[2]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5430" title="Abstract">arXiv:1301.5430</a> [<a
href="/pdf/1301.5430" title="Download PDF">pdf</a>, <a href="/ps/1301.5430" title="Download PostScript">ps</a>, <a
href="/format/1301.5430" title="Other formats">other</a>]</span></dt>
81 <dd>
82 <div class="meta">
83 <div class="list-title">
84 <span class="descriptor">Title:</span> Del Pezzo Surfaces in Weighted Projective Spaces
85 </div>
86 <div class="list-authors">
```

<http://arxiv.org/list/math.AG/new>

```
curl -s http://arxiv.org/list/astro-  
ph/recent  
| grep pdf  
| awk -F \" '{print "http://arxiv.org" $10}'  
  
for i in `cat pdfs`; do wget $i --user-  
agent="Mozilla/5.0"; done
```

⌵ ⌵ ⌵ Bash Terminal

File Edit View Search Terminal Help

```
computer$curl -s http://arxiv.org/list/astro-ph/recent > page.txt  
computer$
```

⌵ ⌵ ⌵ Bash Terminal

File Edit View Search Terminal Help

```
computer$curl -s http://arxiv.org/list/astro-ph/recent > page.txt  
computer$emacs page.txt
```

Bash Terminal

File Edit View Search Terminal Help

File Edit Options Buffers Tools Help

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.o\
rg/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en">
<head>
<title>Astrophysics authors/titles recent submissions</title>
<link rel="shortcut icon" href="/favicon.ico" type="image/x-icon" />
<link rel="stylesheet" type="text/css" media="screen" href="/css/arXiv.css" />
<link rel="alternate" type="application/rss+xml" title="Astrophysics " href="ht\
tp://arxiv.org/rss/astro-ph"/>

</head>
<body class="with-cu-identity">
<div id="cu-identity">
<div id="cu-logo">
<a id="insignia-link" href="http://www.cornell.edu/"></a>
<div id="unit-signature-links">
-UUU:----F1 page.txt Top L1 (Text)-----
page.txt has auto save data; consider M-x recover-this-file
```

Bash Terminal

File Edit View Search Terminal Help

File Edit Options Buffers Tools Help

```
skip=25&show=25">26-50</a> | <a href="/list/astro-ph/pastweek?skip=50&show=25">51-75</a> | <a href="/list/astro-ph/pastweek?skip=75&show=25">76-100</a> | ... | <a href="/list/astro-ph/pastweek?skip=250&show=25">251-259</a> ]</small><br />
```

```
<small>[ showing 25 entries per page: <a href="/list/astro-ph/pastweek?skip=0&show=10">fewer</a> | <a href="/list/astro-ph/pastweek?skip=0&show=50">more</a> | <a href="/list/astro-ph/pastweek?show=259">all</a> ]</small><br />
```

```
<h3>Thu, 24 Jan 2013 (showing first 25 of 53 entries)</h3>
```

```
<dl>
<dt><a name="item1">[1]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5627" title="Abstract">arXiv:1301.5627</a> [<a href="/pdf/1301.5627" title="Download PDF">pdf</a>, <a href="/format/1301.5627" title="Other formats">other</a>]</span></dt>
```

```
<dd>
<div class="meta">
<div class="list-title">
```

```
<span class="descriptor">Title:</span> Clouds and Hazes in Exoplanet Atmospheres
```

```
-UUU:----F1 page.txt 7% L57 (Text Isearch)-----
```

```
I-search: pdf
```

```
1301.5627" title="Abstract">arXiv:1301.5627</a> [pdf], other
```

Bash Terminal

File Edit View Search Terminal Help

```
computer$cat page.txt | grep pdf
<dt><a name="item1">[1]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5627" title="Abstract">arXiv:1301.5627</a> [<a href="/pdf/1301.5627" title="Download PDF">pdf</a>, <a href="/format/1301.5627" title="Other formats">other</a>]</span></dt>
<dt><a name="item2">[2]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5626" title="Abstract">arXiv:1301.5626</a> [<a href="/pdf/1301.5626" title="Download PDF">pdf</a>, <a href="/ps/1301.5626" title="Download PostScript">ps</a>, <a href="/format/1301.5626" title="Other formats">other</a>]</span></dt>
<dt><a name="item3">[3]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5617" title="Abstract">arXiv:1301.5617</a> [<a href="/pdf/1301.5617" title="Download PDF">pdf</a>, <a href="/ps/1301.5617" title="Download PostScript">ps</a>, <a href="/format/1301.5617" title="Other formats">other</a>]</span></dt>
<dt><a name="item4">[4]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5614" title="Abstract">arXiv:1301.5614</a> [<a href="/pdf/1301.5614" title="Download PDF">pdf</a>]</span></dt>
<dt><a name="item5">[5]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5602" title="Abstract">arXiv:1301.5602</a> [<a href="/pdf/1301.5602" title="Download PDF">pdf</a>, <a href="/ps/1301.5602" title="Download PostScript">ps</a>, <a href="/format/1301.5602" title="Other formats">other</a>]</span></dt>
<dt><a name="item6">[6]</a>&nbsp; <span class="list-identifier"><a href="/abs/1301.5601" title="Abstract">arXiv:1301.5601</a> [<a href="/pdf/1301.5601" title="
```

Bash Terminal

File Edit View Search Terminal Help

```
computer$cat page.txt | grep pdf | awk -F \" '{print $10}'  
/pdf/1301.5627  
/pdf/1301.5626  
/pdf/1301.5617  
/pdf/1301.5614  
/pdf/1301.5602  
/pdf/1301.5601  
/pdf/1301.5600  
/pdf/1301.5599  
/pdf/1301.5591  
/pdf/1301.5589  
/pdf/1301.5575  
/pdf/1301.5572  
/pdf/1301.5571  
/pdf/1301.5567  
/pdf/1301.5562  
/pdf/1301.5559  
/pdf/1301.5555  
/pdf/1301.5531  
/pdf/1301.5514  
/pdf/1301.5499  
/pdf/1301.5484
```

Bash Terminal

File Edit View Search Terminal Help

```
computer$cat page.txt | grep pdf | awk -F \" '{print \"http://arxiv.org\" $10}'  
http://arxiv.org/pdf/1301.5627  
http://arxiv.org/pdf/1301.5626  
http://arxiv.org/pdf/1301.5617  
http://arxiv.org/pdf/1301.5614  
http://arxiv.org/pdf/1301.5602  
http://arxiv.org/pdf/1301.5601  
http://arxiv.org/pdf/1301.5600  
http://arxiv.org/pdf/1301.5599  
http://arxiv.org/pdf/1301.5591  
http://arxiv.org/pdf/1301.5589  
http://arxiv.org/pdf/1301.5575  
http://arxiv.org/pdf/1301.5572  
http://arxiv.org/pdf/1301.5571  
http://arxiv.org/pdf/1301.5567  
http://arxiv.org/pdf/1301.5562  
http://arxiv.org/pdf/1301.5559  
http://arxiv.org/pdf/1301.5555  
http://arxiv.org/pdf/1301.5531  
http://arxiv.org/pdf/1301.5514  
http://arxiv.org/pdf/1301.5499  
http://arxiv.org/pdf/1301.5484
```

Bash Terminal

File Edit View Search Terminal Help

```
computer$cat page.txt | grep pdf | awk -F \" '{print \"http://arxiv.org\" $10}' >  
pdfs  
computer$
```

 Bash Terminal

File Edit View Search Terminal Help

```
computer$for i in `cat pdfs`; do echo $i; done  
http://arxiv.org/pdf/1301.5627  
http://arxiv.org/pdf/1301.5626  
http://arxiv.org/pdf/1301.5617  
http://arxiv.org/pdf/1301.5614  
http://arxiv.org/pdf/1301.5602  
http://arxiv.org/pdf/1301.5601  
http://arxiv.org/pdf/1301.5600  
http://arxiv.org/pdf/1301.5599  
http://arxiv.org/pdf/1301.5591  
http://arxiv.org/pdf/1301.5589  
http://arxiv.org/pdf/1301.5575  
http://arxiv.org/pdf/1301.5572  
http://arxiv.org/pdf/1301.5571  
http://arxiv.org/pdf/1301.5567  
http://arxiv.org/pdf/1301.5562  
http://arxiv.org/pdf/1301.5559  
http://arxiv.org/pdf/1301.5555  
http://arxiv.org/pdf/1301.5531  
http://arxiv.org/pdf/1301.5514  
http://arxiv.org/pdf/1301.5499  
http://arxiv.org/pdf/1301.5484
```

Bash Terminal

File Edit View Search Terminal Help

```
computer$for i in `cat pdfs`; do cowsay $i; done
```

```
< http://arxiv.org/pdf/1301.5627 >
```

```
-----  
  \      ^__^  
   \      (oo)\_____   
      (__)\\       )\\//  
         ||----w |  
         ||     ||
```

```
< http://arxiv.org/pdf/1301.5626 >
```

```
-----  
  \      ^__^  
   \      (oo)\_____   
      (__)\\       )\\//  
         ||----w |  
         ||     ||
```

```
< http://arxiv.org/pdf/1301.5617 >
```

```
-----  
  \      ^__^  
   \      (oo)\_____
```

Bash Terminal

File Edit View Search Terminal Help

```
computer$wget http://arxiv.org/pdf/1301.5445 --user-agent="Mozilla/5.0"  
--2013-01-24 16:55:06-- http://arxiv.org/pdf/1301.5445  
Resolving arxiv.org (arxiv.org)... 128.84.158.119  
Connecting to arxiv.org (arxiv.org)|128.84.158.119|:80... connected.  
HTTP request sent, awaiting response... 302 Found  
Location: http://arxiv.org/pdf/1301.5445.pdf [following]  
--2013-01-24 16:55:06-- http://arxiv.org/pdf/1301.5445.pdf  
Reusing existing connection to arxiv.org:80.  
HTTP request sent, awaiting response... 200 OK  
Length: 244839 (239K) [application/pdf]  
Saving to: `1301.5445'  
  
100%[=====>] 244,839      613K/s   in 0.4s  
  
2013-01-24 16:55:06 (613 KB/s) - `1301.5445' saved [244839/244839]  
  
computer$
```

⌵ ⌵ ⌵ Bash Terminal

File Edit View Search Terminal Help

```
computer$for i in `cat pdfs`; do wget $i --user-agent="Mozilla/5.0"; done
```



1301.5445
244.8 kB



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1.4 MB



1301.5477
324.6 kB



1301.5478
332.2 kB



1301.5484
387.8 kB



1301.5499
1.8 MB



1301.5514
749.3 kB



1301.5531
5.1 MB



1301.5555
1.5 MB



1301.5559
507.9 kB



1301.5562
193.2 kB



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2.1 MB



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1301.5572
3.3 MB



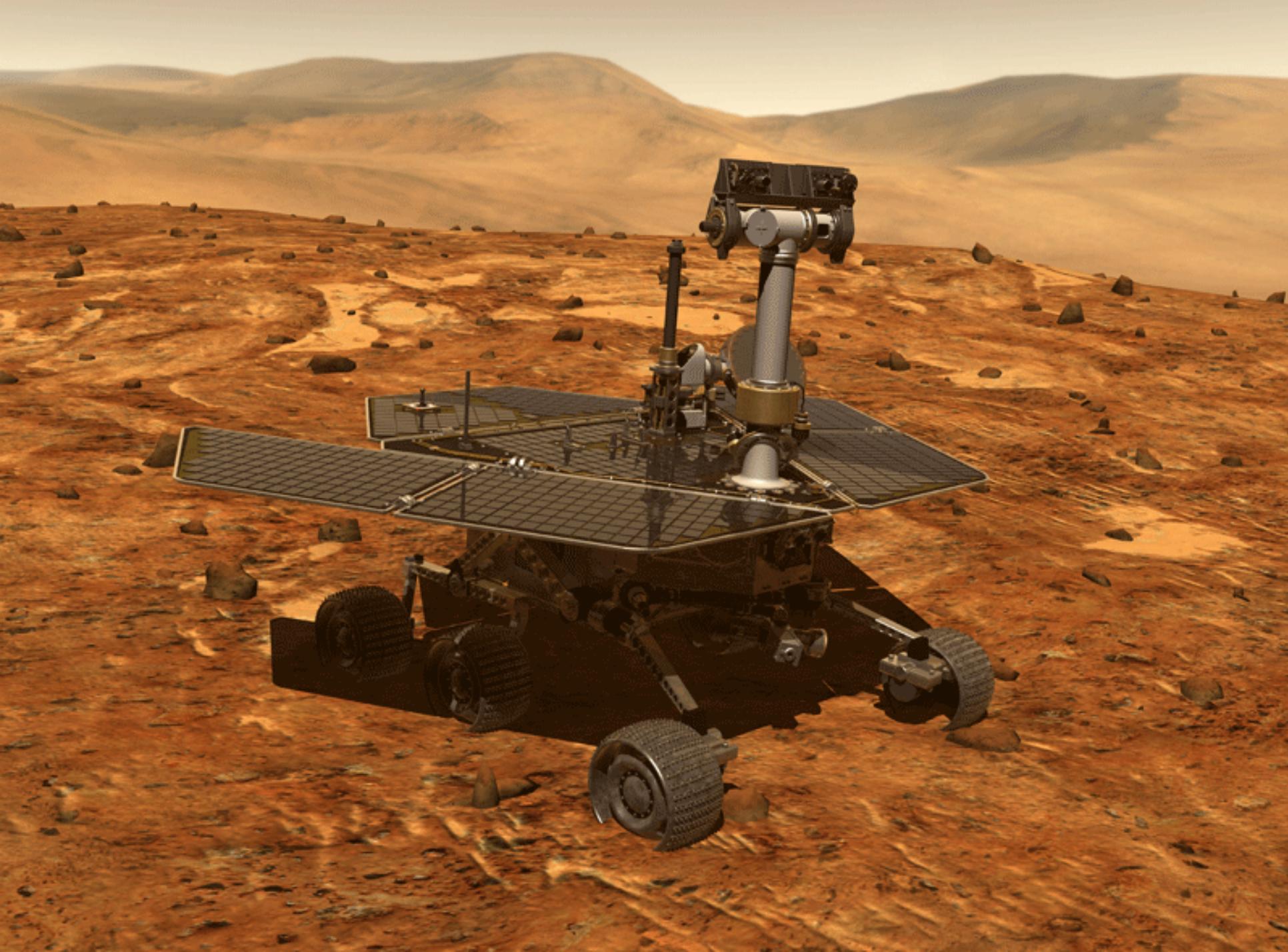
1301.5575
1.6 MB



1301.5589
519.1 kB

FOSS is

INDUSTRIAL





"When we rolled into Baghdad, we did it
using open source."

- General Nickolas G. Justice

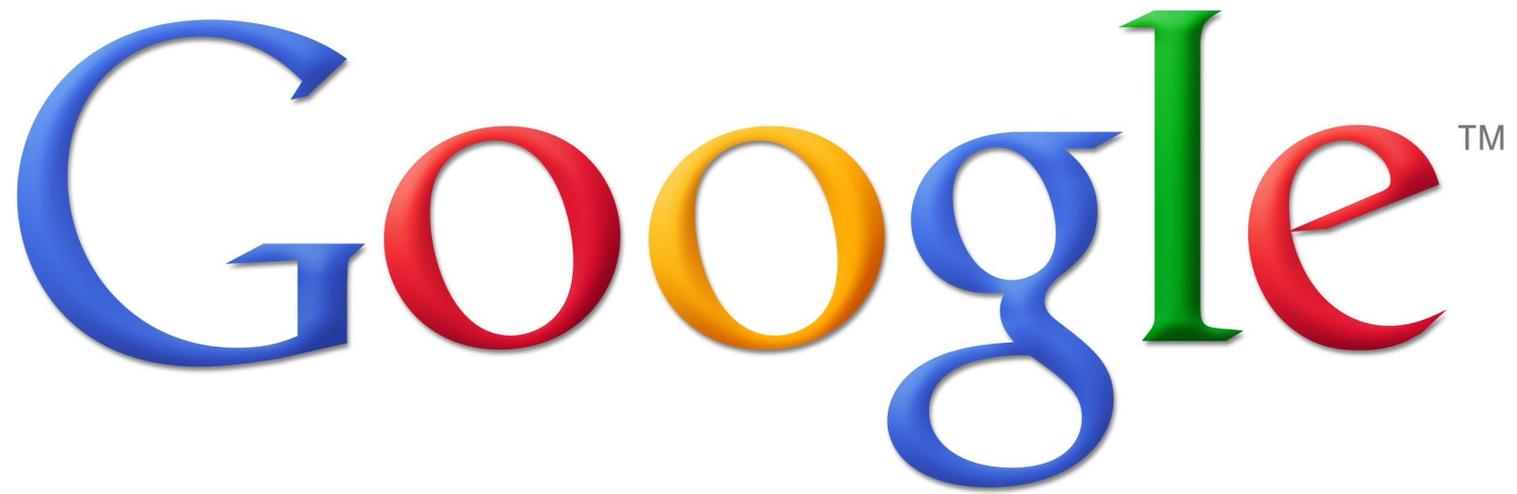


Google™

Goobuntu

“YOU’D BE A FOOL TO USE ANYTHING BUT LINUX.”

Thomas Bushnell (Google)

The Google logo is displayed in its characteristic multi-colored font: blue 'G', red 'O', yellow 'O', blue 'g', green 'l', and red 'e'. A small 'TM' trademark symbol is located to the upper right of the 'e'.

Google™

Puppet

“BEING USED TO MANAGE ALL RECENT MAC OS X AND LINUX DESKTOPS, LAPTOPS, SERVERS IN THE CORPORATE INFRASTRUCTURE.”



OAuth

OPEN AUTHENTICATION PROTOCOL TO LOGIN.



**Linux, Centos (Redhat)
or Debian, BSD**



Puppet

Hadoop (Aka MapReduce)

MySQL, PHP

Today's events!

Wireless Game

Connect to WiFi named "FOSS Hacking Innovation" and visit any website



**FOSS/Hacking/Innovation
Game**

Overview

- Overview of today ●
- Play Game ●

What does FOSS stand for?

Answers

- Fun Or Sweet Software ●
- Fair and Open Source Software ●
- Free and Open Source Software ●
- Fair and Open Stack Software ●

Controls for User

- Quit ●

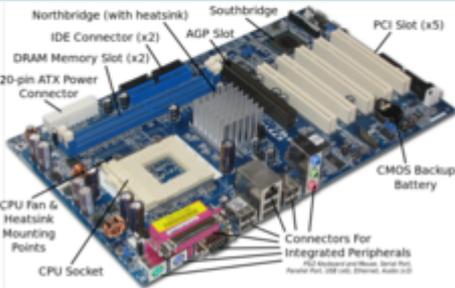
 FOSS/Hacking/Innovation
Game

Table Presentations

Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

BUILD YOUR OWN PC
DAVE CHAPMAN, WILLIAM CONSTANTIN, ANTHONY RED,
NICHOLAS ROSATO, JOSEPH PAUL COHEN

Being able to see the forest for the trees is the goal for this table. Everyone uses a computer but do they know the parts that work together? Visitors will assemble and debug desktop computers that they put together from spare parts. Everyone should learn the knowledge needed to go home and build their own computer from parts.



Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

ARDUINO BASICS
HENRY ZLO, JOHN LIANG, AND ANNA GAVRIELMAN

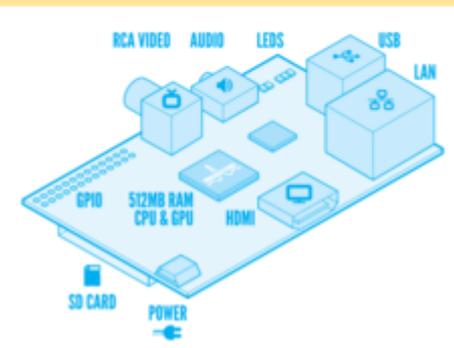
This exhibit will teach you how to program electronic devices that interact with the real world. Using the Arduino, an open source hardware platform, students will learn the basics of programming, apply these principles to interfacing with hardware, and ultimately do cool stuff.



Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

RASPBERRY PI W/BLUETOOTH
NOTICE STUBBS AND JOSEPH PAUL COHEN

Raspberry Pi is a small credit card sized Linux computer that runs a variant of Debian. Bluetooth can be used to control the device by allowing wireless shell access into the system using the blucut (<http://blucut.af.net>) command line tool. Bluetooth can also be used to create a wireless speaker system.



Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

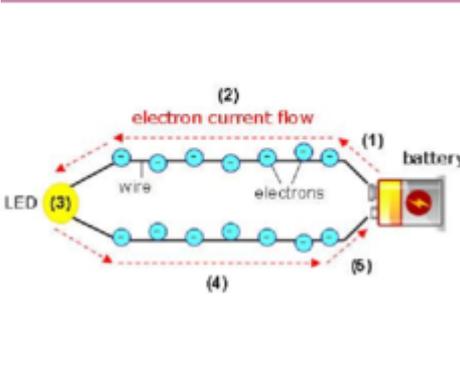
PLAYING MARIO AGAINST [A] PYTHON
BRANDON TANSEY

The ability to script is an essential addition to any tinkerer's skill set. Whether automating backups, parsing data, or saving princesses, scripting can almost always make your life a little bit easier. Come take on Brandon's Mario-playing Python script to see how scripting can not only complete repetitive tasks for you, but also complete tasks more effectively than the manual approach.

Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

SQUISHY CIRCUIT
LYDIA BEALL & MIRIAM LEDLEYS

Explore electronics and create circuits using Playdough.



Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

MAKEY MAKEY
JACKIE GONZALEZ

MaKey MaKey is an invention kit for the 21st century. Turn everyday objects into touchpads and combine them with the internet. It's a simple invention kit for Beginners and Experts doing art, engineering, and everything in between. Come explore MaKey MaKey with the Museum of Science Computer Clubhouse!



Innovation, Hacking, Free and Open Source:
Think Different at the Museum of Science Boston

SMART PHONE AD-HOC NETWORKING (SPAN)
JEFF ROBBLE, OLIVER CHONG, SHELDON DURRANT

Disaster strikes! Cell towers are down and the Internet is out. What do you do? Install the open source Smart Phone Ad-Hoc Networking (SPAN) app on your phone, share it with your peers, and create your own mesh network from scratch. No infrastructure (or assembly) required.



Table Presentations