

# Reaching people with open source creative technology

Dave Griffiths/FoAM Kernow

# ~~Reaching~~ Empowering people with open source creative technology

Dave Griffiths/FoAM Kernow

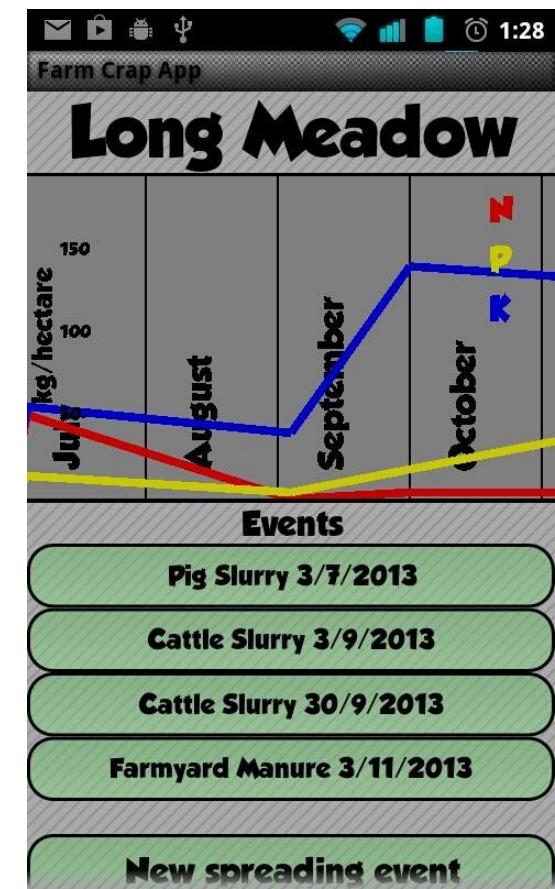


**WHERE IS THAT NIGHTJAR**

Hunt nightjars and help us with our research

[Back to site](#) [Start playing](#)

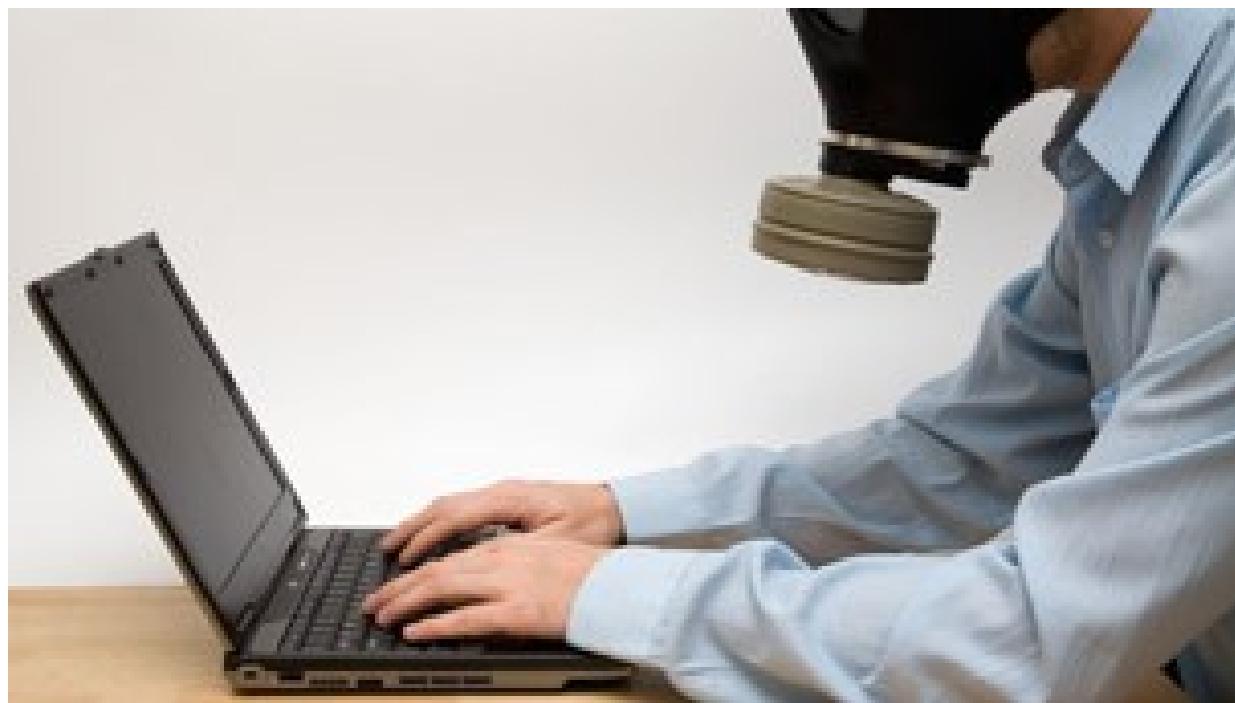
Sensory Ecology & Evolution UNIVERSITY OF EXETER UNIVERSITY OF CAMBRIDGE BBSI bioscience for th



# Perceptions of technology

```
top - 09:24:15 up 42 min, 2 users, load average: 0.64, 0.40, 0.26
Tasks: 102 total, 2 running, 100 sleeping, 0 stopped, 0 zombie
Cpu(s): 5.3%us, 13.3%sy, 0.0%ni, 80.3%id, 1.0%wa, 0.0%hi, 0.0%si, 0.0%
Mem: 775280k total, 635608k used, 139672k free, 36112k buffers
Swap: 497972k total, 0k used, 497972k free, 340472k cached
```

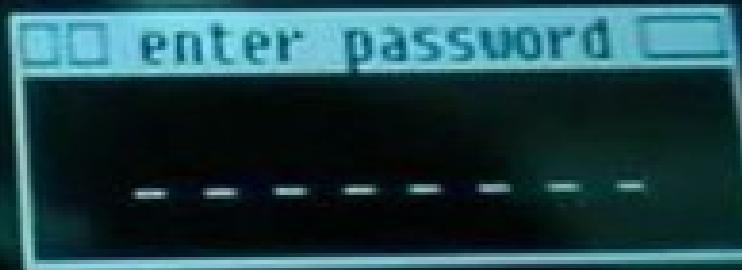
PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
4807	root	20	0	69208	22m	8816	S	7.7	3.0	1:33.13	Xorg
5192	roger	20	0	15348	2692	1700	S	4.0	0.3	0:19.38	gnome-screensav
5193	roger	20	0	20692	11m	7566	S	1.3	1.6	0:14.84	metacity
6916	roger	20	0	28656	15m	9176	S	1.3	2.0	0:00.36	gnome-screensho
5057	roger	20	0	7228	431	9116	S	0.7	0.6	0:01.66	gconfd-2
5168	roger	20	0	47760	72m	8808	S	0.7	2.4	0:14.14	gnome-settings-
5195	roger	20	0	3896	21m	13m	S	0.7	2.9	0:10.98	gnome-panel
6899	roger	20	0	208	1104	852	R	0.7	0.1	0:00.10	top
5196	roger	20	0	1732	32m	14m	S	0.3	4.7	0:04.88	nautilus
6590	roger	20	0	151m	64m	22m	S	0.3	8.0	0:44.37	fir
6859	roger	20	0	96968	26m	14m	R	0.3	3.5	0:01.58	gnome-terminal
1	root	0	0	2844	1692	544	S	0.0	0.2	0:01.48	init
2	root	-5	0	0	0	0	S	0.0	0.0	0:00.02	kthreadd
3	root	RT	-5	0	0	0	S	0.0	0.0	0:00.00	migration/0
4	root	15	-5	0	0	0	S	0.0	0.0	0:00.00	softirqd/0
5	root	RT	-5	0	0	0	S	0.0	0.0	0:00.00	watchdog/0
6	root	15	-5	0	0	0	S	0.0	0.0	0:00.16	events/0
7	root	15	-5	0	0	0	S	0.0	0.0	0:00.06	khelper
8	root	15	-5	0	0	0	S	0.0	0.0	0:00.00	lsm





```
22/tcp      open  ssh
              service ssh

6 exact OS matches for host

nmap run completed -- 1 IP address (1 host up) scanned
SSHNUKE 10.2.2.2 -rootpw="Z10H0101"
connecting to 10.2.2.2:ssh ... successful.
attempting to exploit SSHv1 CRC32 ... successful.
setting root password to "Z10H0101".
listen open: Access Level <9>
ssh 10.2.2.2 -l root
t@10.2.2.2's password: 
```



$$\cos(0.9 \cdot \pi) = 0$$

$$E_p =$$



Myths:

- Code is scary!
- Programming is a dark art!
- Black boxes...
- Realm of pure maths...
- Only for experts.

# Digital Divide

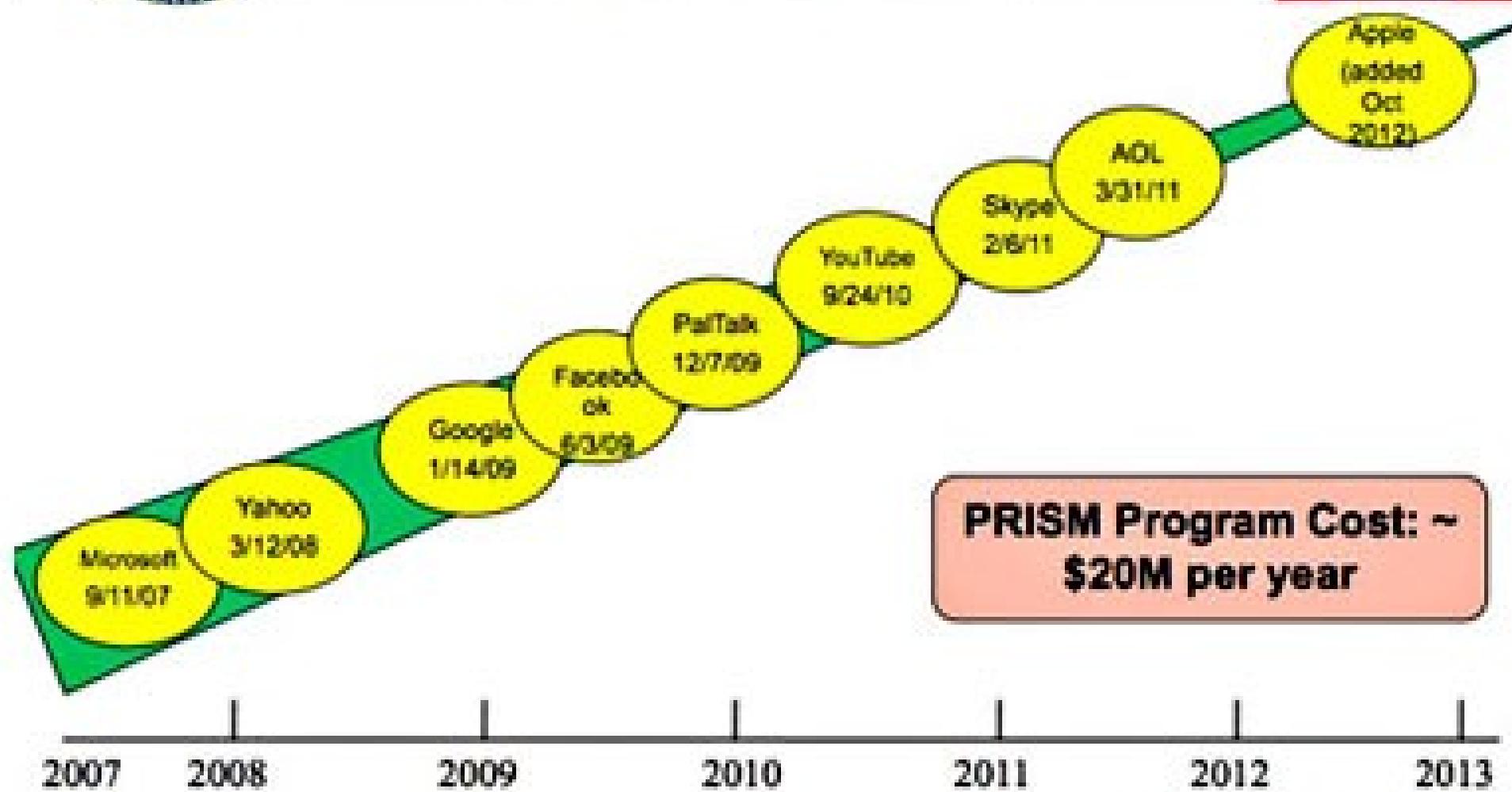
Those with/without access to technology

Producers/consumers of technology

Increasingly political...

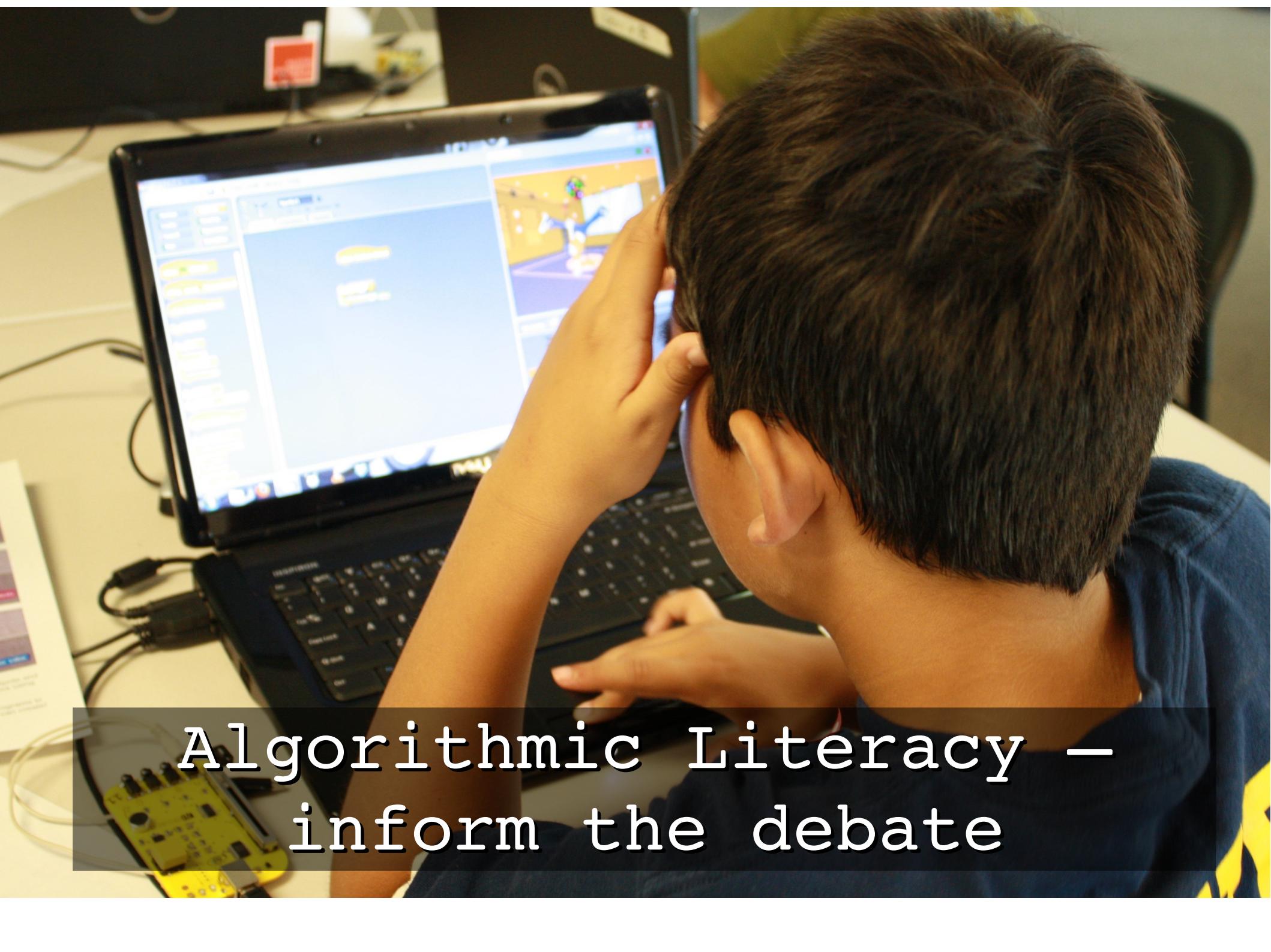


(TS//SI//NF) Dates When PRISM Collection Began For Each Provider





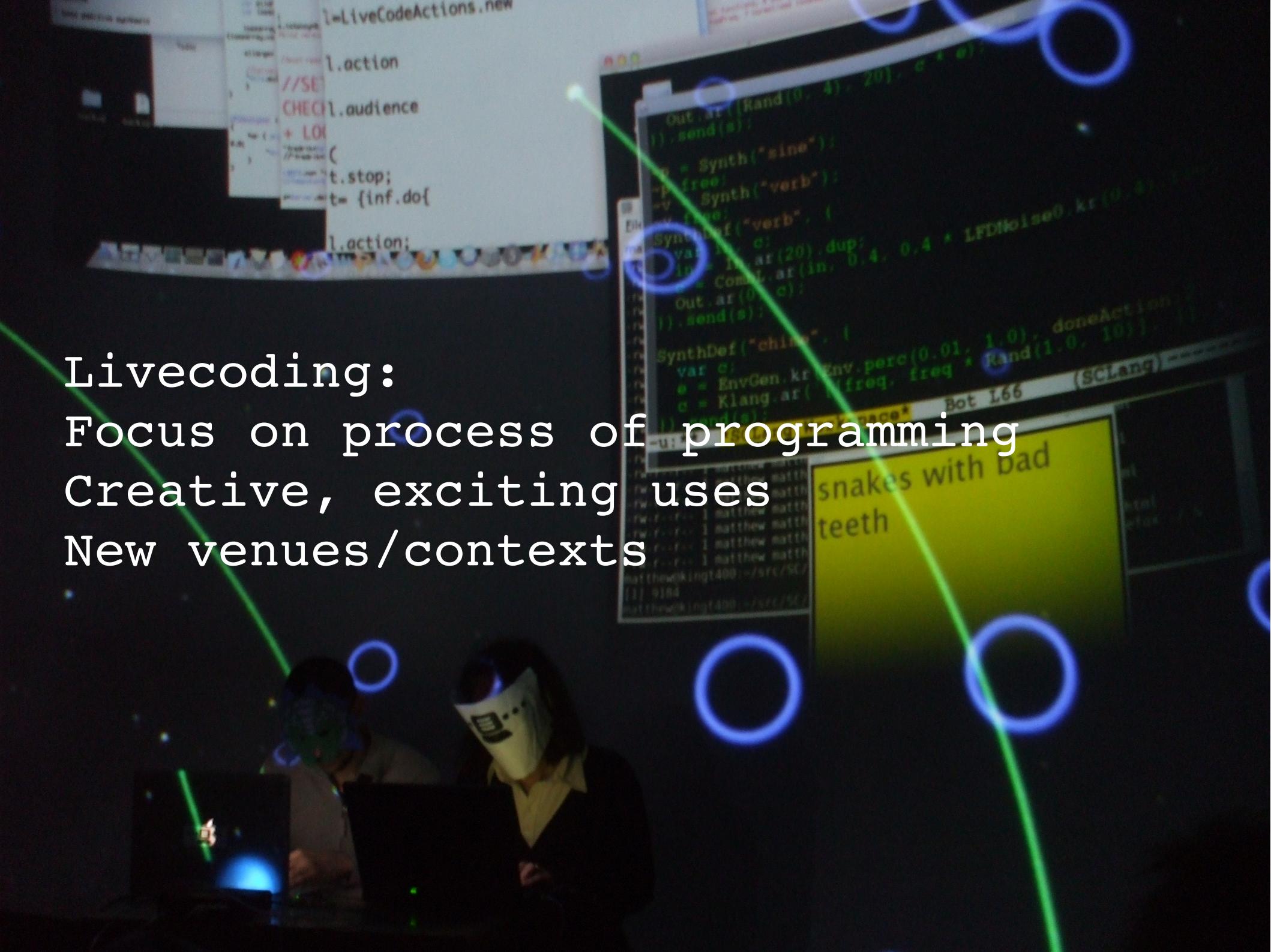
"Nasty source code or software that's flying through the Internet, that's developed, and it's very sophisticated, by the Chinese and the Russians and the Iranians and other groups and non-nation-state actors that are going to steal your personal information."

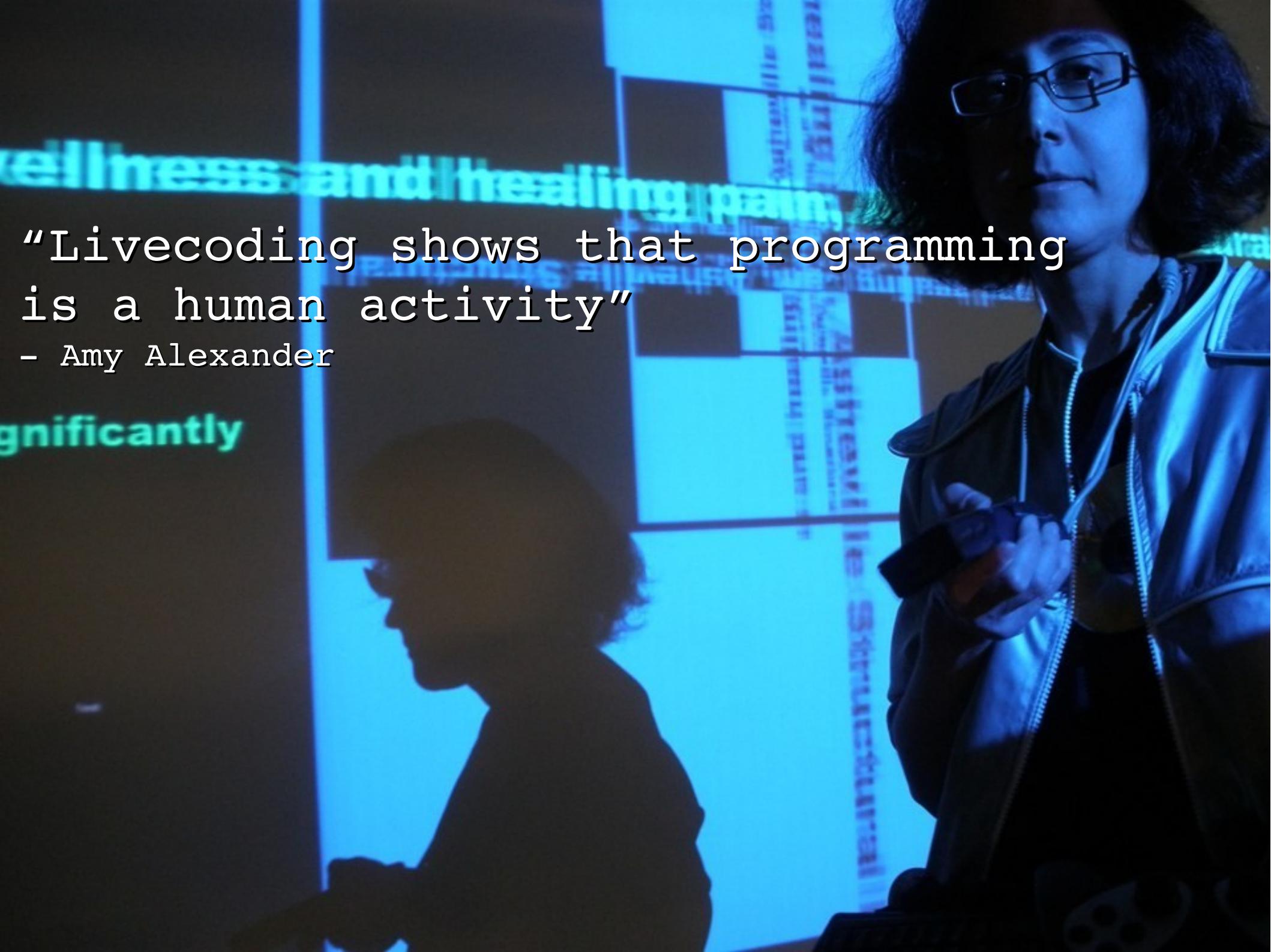
A young child with dark hair is seen from the side and back, sitting at a desk and working on a black laptop. The screen of the laptop displays the Scratch programming environment, showing a script editor on the left and a stage with a cat sprite on the right. The child's hands are visible, one resting near the laptop's trackpad and the other near the keyboard. In the foreground, a yellow microcontroller board with various components and wires is partially visible. The background shows a white wall with some equipment and cables.

Algorithmic Literacy –  
inform the debate



Livecoding:  
Focus on process of programming  
Creative, exciting uses  
New venues/contexts

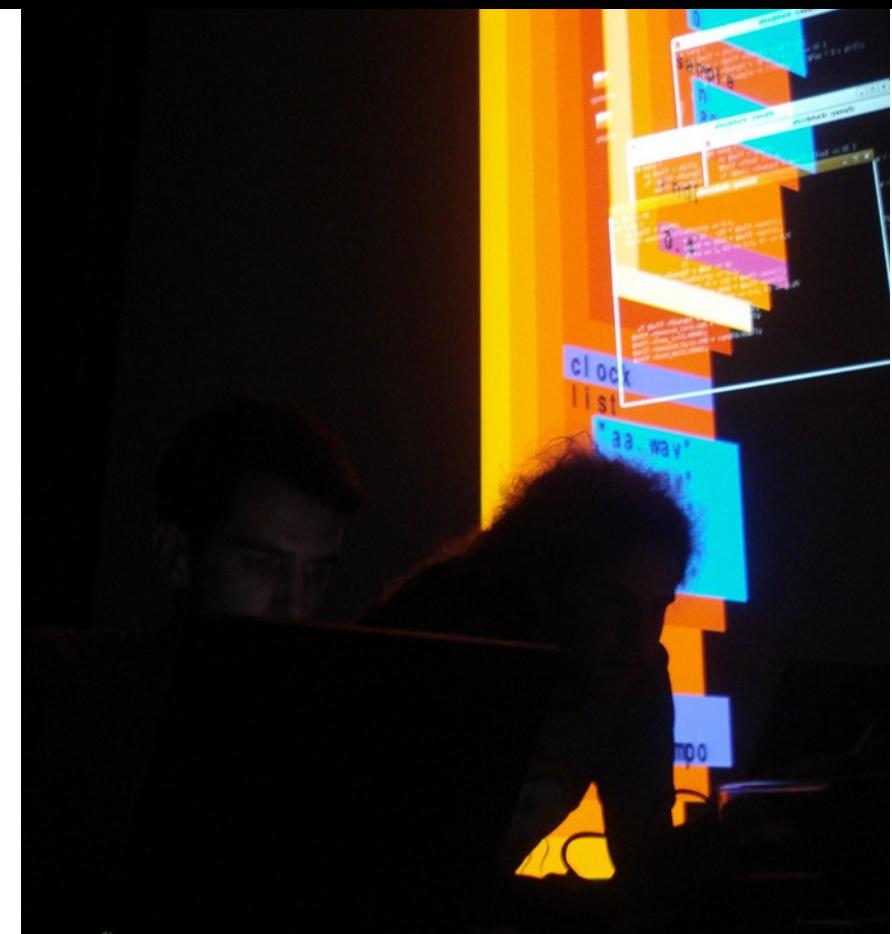
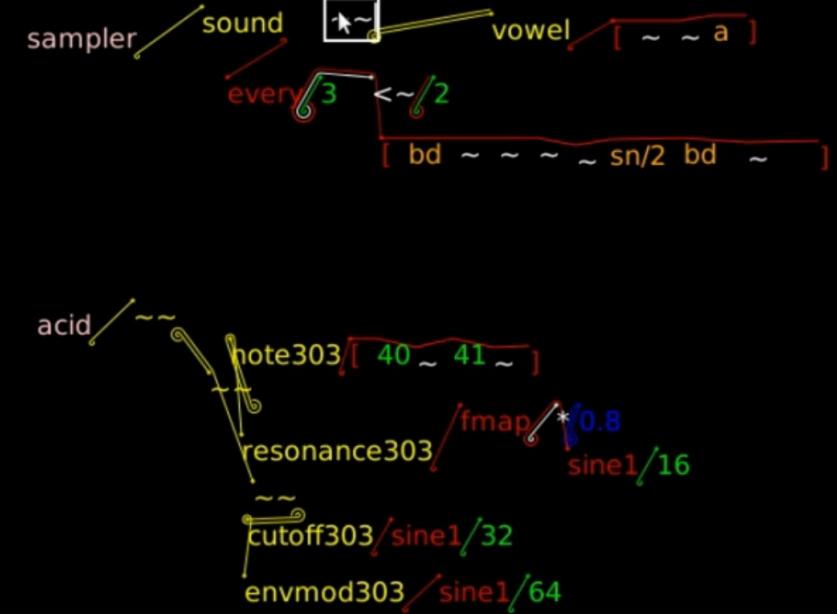
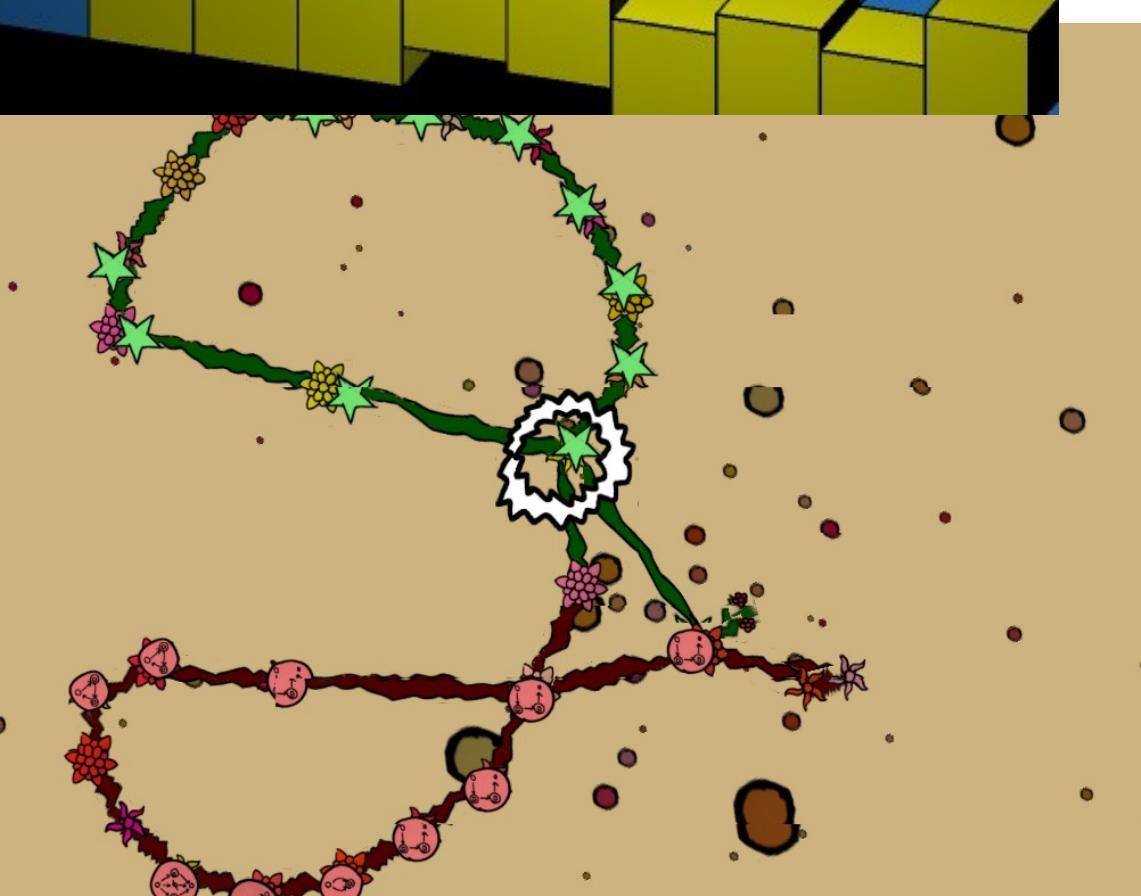


A photograph of a woman with dark hair and glasses, wearing a dark zip-up hoodie. She is looking towards the right side of the frame. In the background, there is a large screen displaying a grid of code snippets or terminal windows with various lines of text. The overall lighting is low, with a blue tint, suggesting a computer monitor's glow.

"Livecoding shows that programming  
is a human activity"

- Amy Alexander

gnificantly



Fluxus demo

# Software Art



A 'Piet' program that prints “hello world”

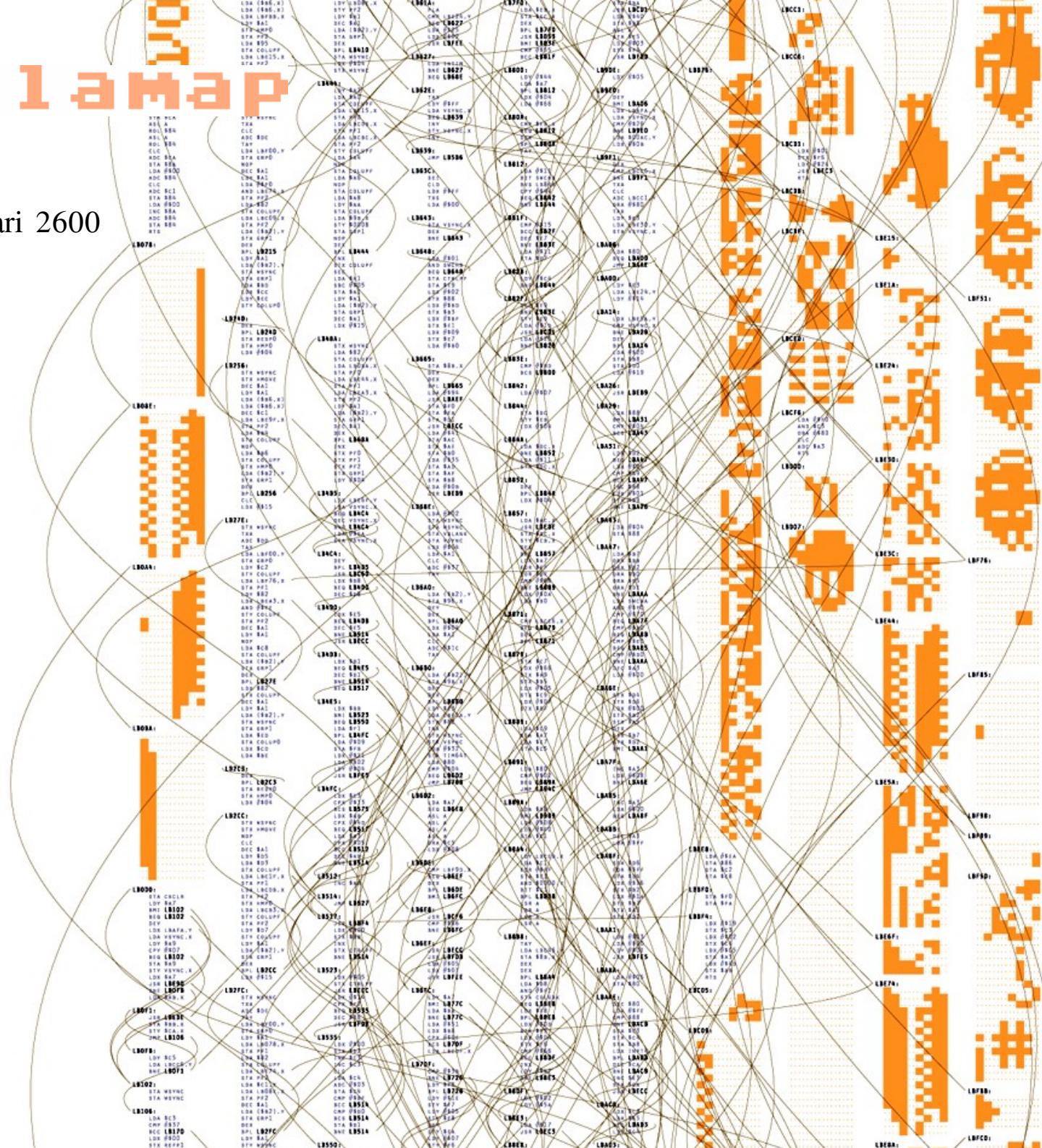
```

*****>9"+ ",>, ,1-:v >:, , "@ " v>1+ :4 `! v>1~5v>01g1+802g-g:"a" ` v>+03g1+8v
*RNBQKBNR*, "v:+1, " " < v4-1~: ^v+5< >"( : niw U">:#, _@#`!+`g40<0
*PPPPPPPPP*+vp00:+1g <p < >:, "G" `! | p>4*x:7 v->$$^||! -"K":g-g408+1g30<:>"p"-7^4
*.....*5>8`!55+, #v_9"+ , v v5 $<^`0\`_v#!<_ >: ". "-!#v_ "a" `#v_ #| `v". "p-g<
*.....*5v9.-`9g00<#v!:-1, , < >5+, v
*.....* >"| ", 1-::! | >#v_ "+-``" v"q"+7gp90+"5"*"e" g<<v01p9p8pp-g20<
*.....* ,gg00-`9 < >55^v , 7 $$< > %00p09g"@"4*x+:8%v9|<'8`9p00:+1g$<
*ppppppppp*< >
*rnbqkbnr*>:"`"+, 04g :"9"\-, p` "-"P"-v#-"N":_v#-"K":_v#-"B"<1 ^p90+g90*gg00`<
*****>g30pg20g10". "+!`g< >2g1+v>$2v%2g$< v< >gv:>+02p8/8%1+:01p0v
>01g:"`"+, 02g :"9"\-, g :"P"-804` v%2gp40< >100g2/2%#v_v$| %2<|- "Q":_v#-"R":gg2<
`!"niw I">:#, _@ v` _g2/2%2*vv0_v#%2/4g00<\< >#`#< v>#$<
`"-k" $ #v_ v:+g10-1<>\->\00g8/2% v>g2/2%2*1-0v> g2/2%2*1-v
`0`"a":_v#-.":gg40g3< 1 >:03p0`\04gg" a" vv0_v#< v-1*2%2/4g0< v_v#%2/4g00<
`!p80:+1g8$<>04g0`*904g`*` >g:03p04gg".-! v >\->0vv <\<>4pg8/8%v
`*`g309`0g3 < v%2/2g00!-3g40_v<>v0+g1<>05p06p1g03p2g0` v_v#<
Chess program on Befunge'93 >3g04g1+:04pgv 3 !>3p02gv v!p30:+g50g30-1 <>v
"Hungry dragon" v1.1 |< vp3_v#-.":< p|< vp40+<v_03g04g06g+:04pg".-!|
by mtve at frox25.dhs.org < < < < < < $<

```

# distellamap

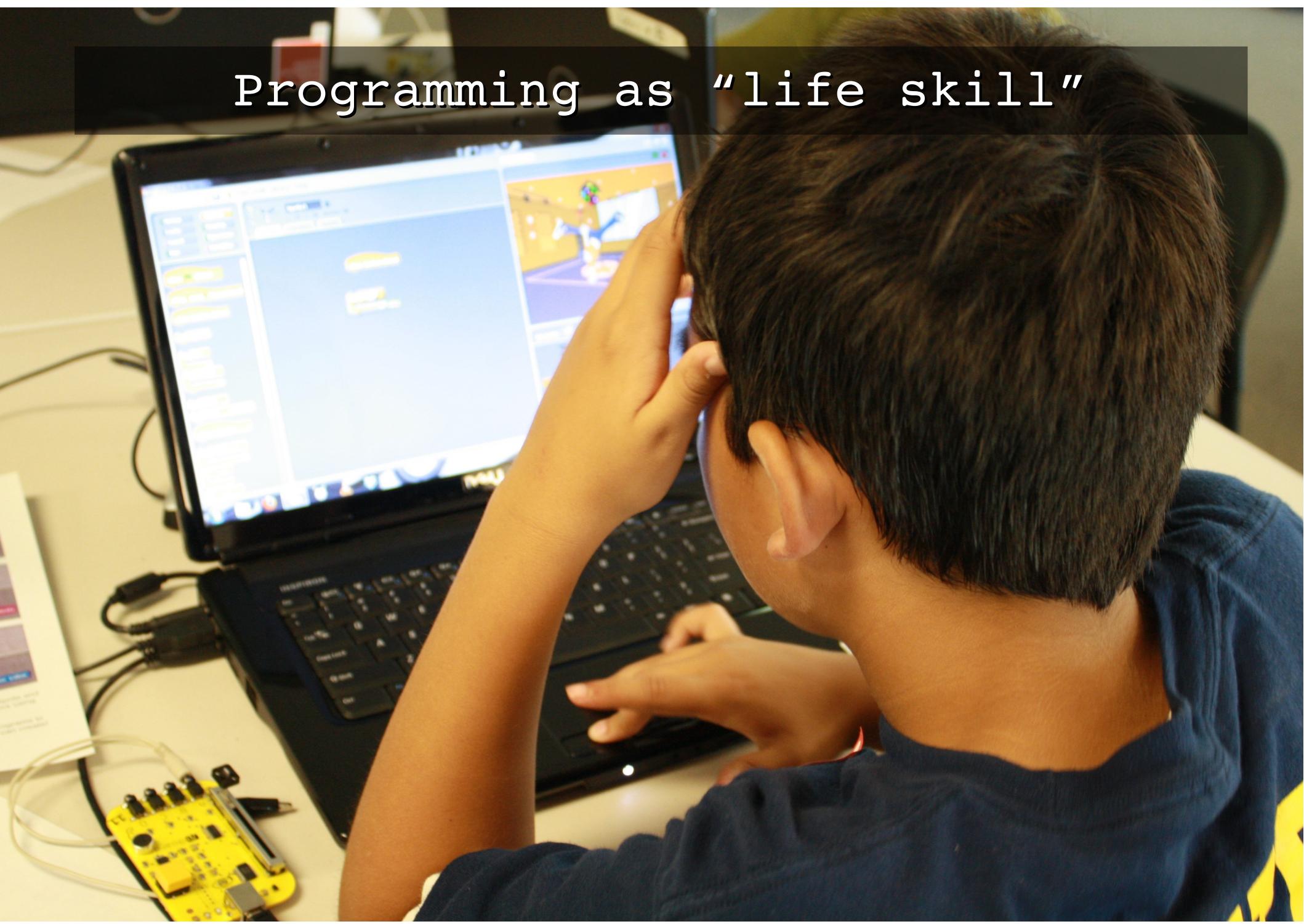
By Ben Fry. Seeing the  
operation of code in Atari 2600  
games.



Minecraft Beta 1.3\_01



# Programming as “life skill”



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28 November 2011 Last updated at 08:45

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## Rory Cellan-Jones

Technology correspondent

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## Coding - the new Latin

[COMMENTS \(618\)](#)

The campaign to boost the teaching of computer skills - particularly coding - in schools is gathering force.

Today the likes of Google, Microsoft and other leading technology names will lend their support to the case made to the government earlier this year in a report called Next Gen. It argued that the UK could be a global hub for the video games and special effects industries - but only if its education system got its act together.

The statistics on the numbers going to university to study computing make sobering reading. In 2003 around 16,500 students applied to UCAS for places on computer science courses.

By 2007 that had fallen to just 10,600, and although it's recovered a little to 13,600 last year, that's at a time in major growth in overall applications, so the percentage of students looking to study the subject has fallen from 5% to 3%. What's more, computing science's reputation as a geeky male subject has been reinforced with the percentage of male applicants



"The tool of the 21st century is the computer", says Alex Hope, co-author of Livingstone...



00.00

00.00

### More from Rory

Gadgets get connected

Blackberry boss - don't underestimate us

Ballmer and the culture of innovation

Tablets take centre

## Top Stories



New York major disaster declared

Mother admits killing children

Breast screening harm highlighted

Two soldiers dead in Afghanistan

UK's first 4G service launches

## Features & Analysis



### Ikea effect

How has 25 years of Swedish furniture changed the UK?



### Q&A: Breast screening

A look at why there are calls for change to screening advice



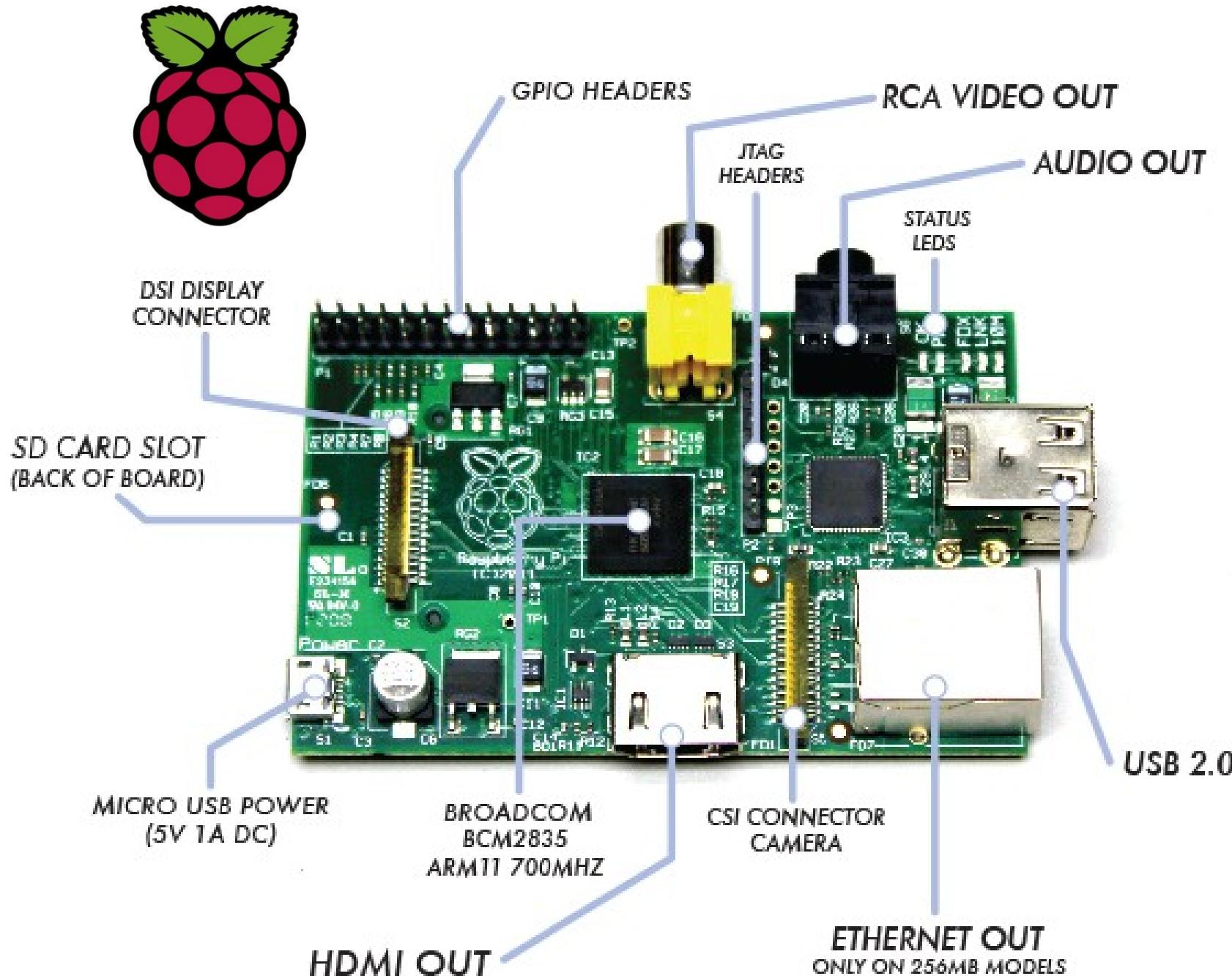
### Face on strike

The day I woke up with only half a smile

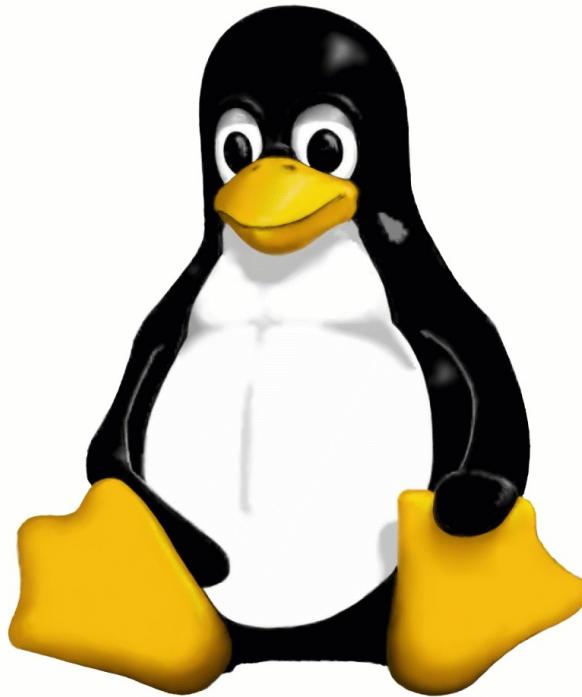


### Killer twist

How can audiences avoid movie spoilers?

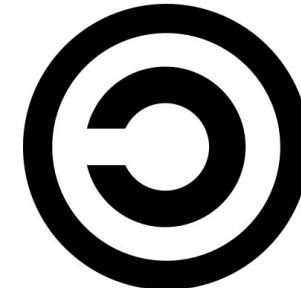


# Open source (Free software)



**WIKIPEDIA**  
The Free Encyclopedia

 **creative  
commons**



A focus on communities rather than products

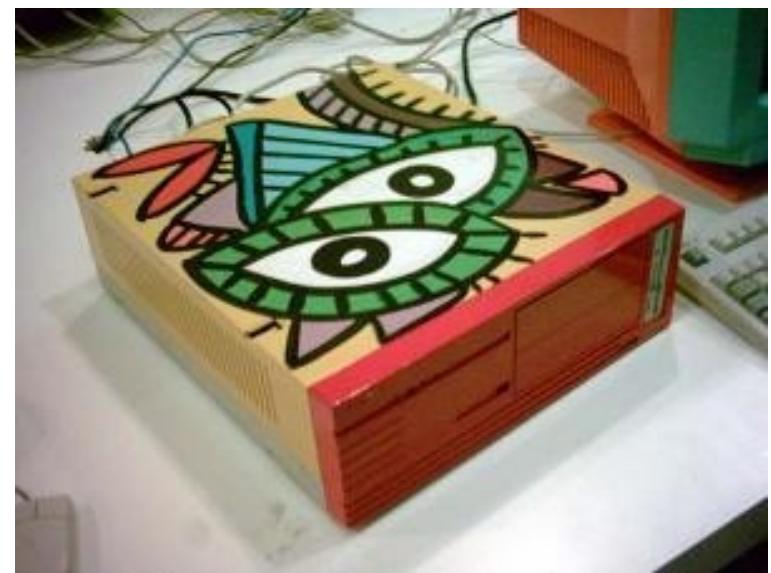
Meshes well with arts practice

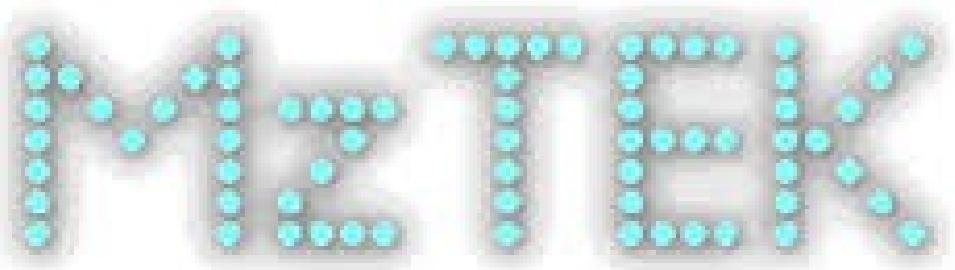


Open source allows new relationships with technology



# MetaReciclagem

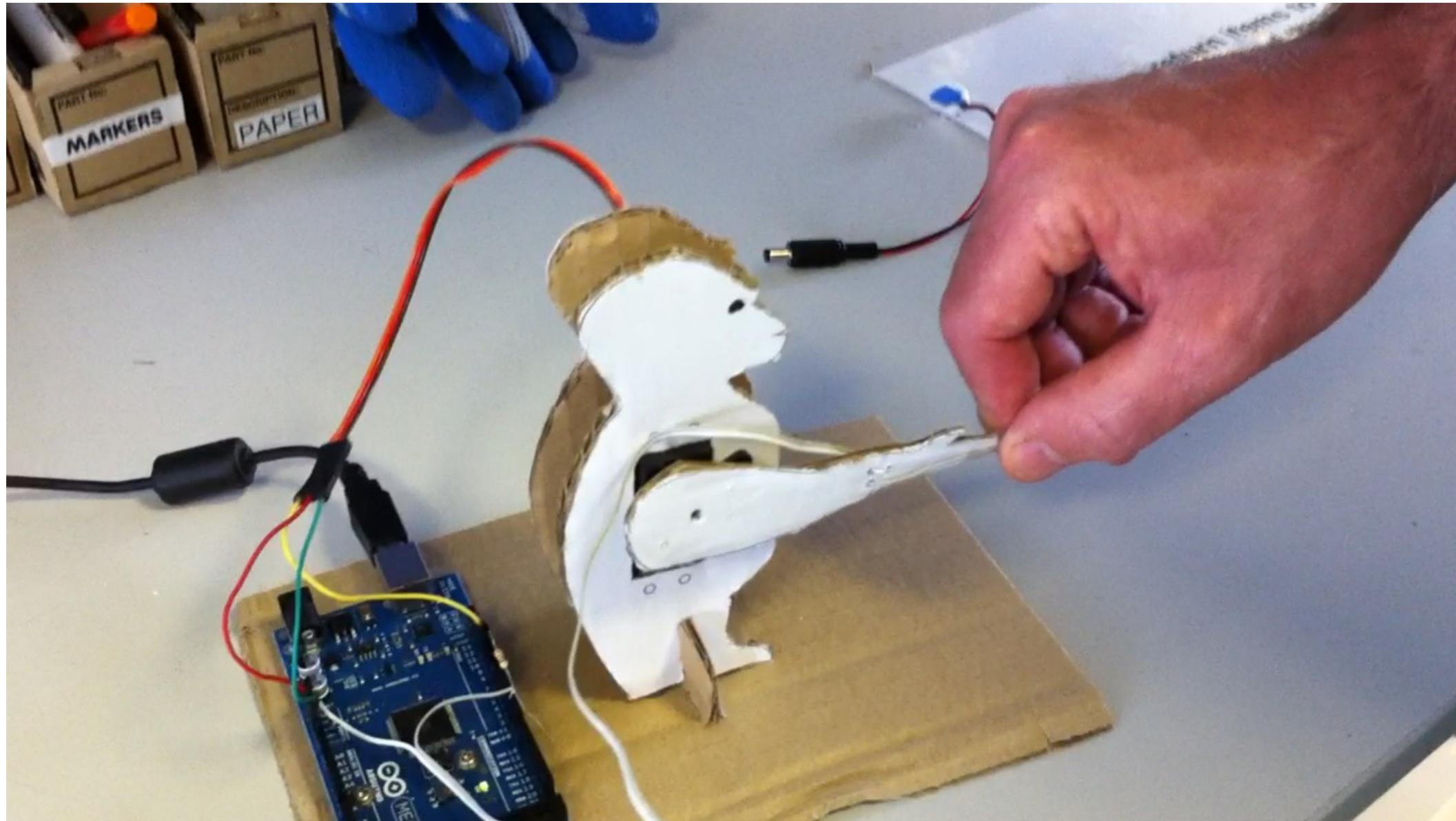


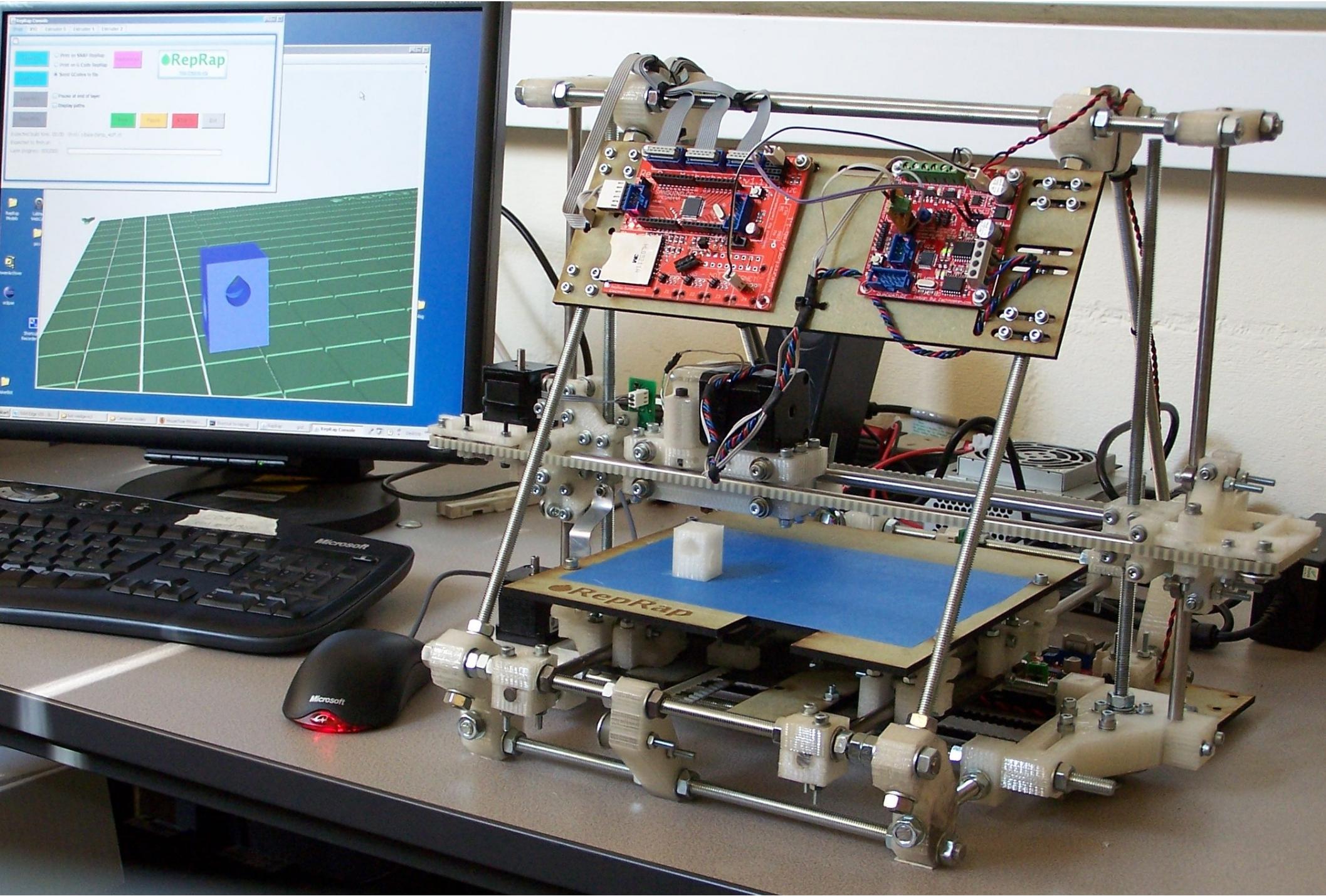


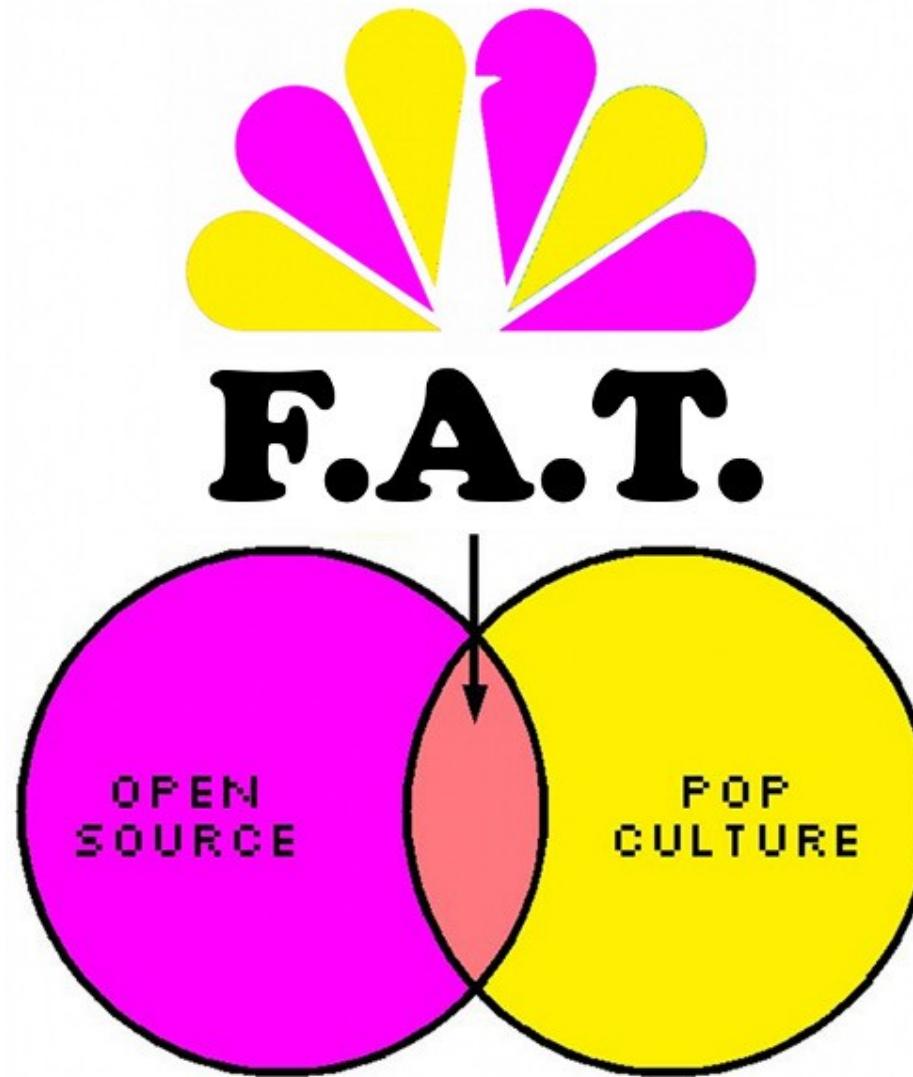
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Women in Computing Workshop at  
Goldsmiths University





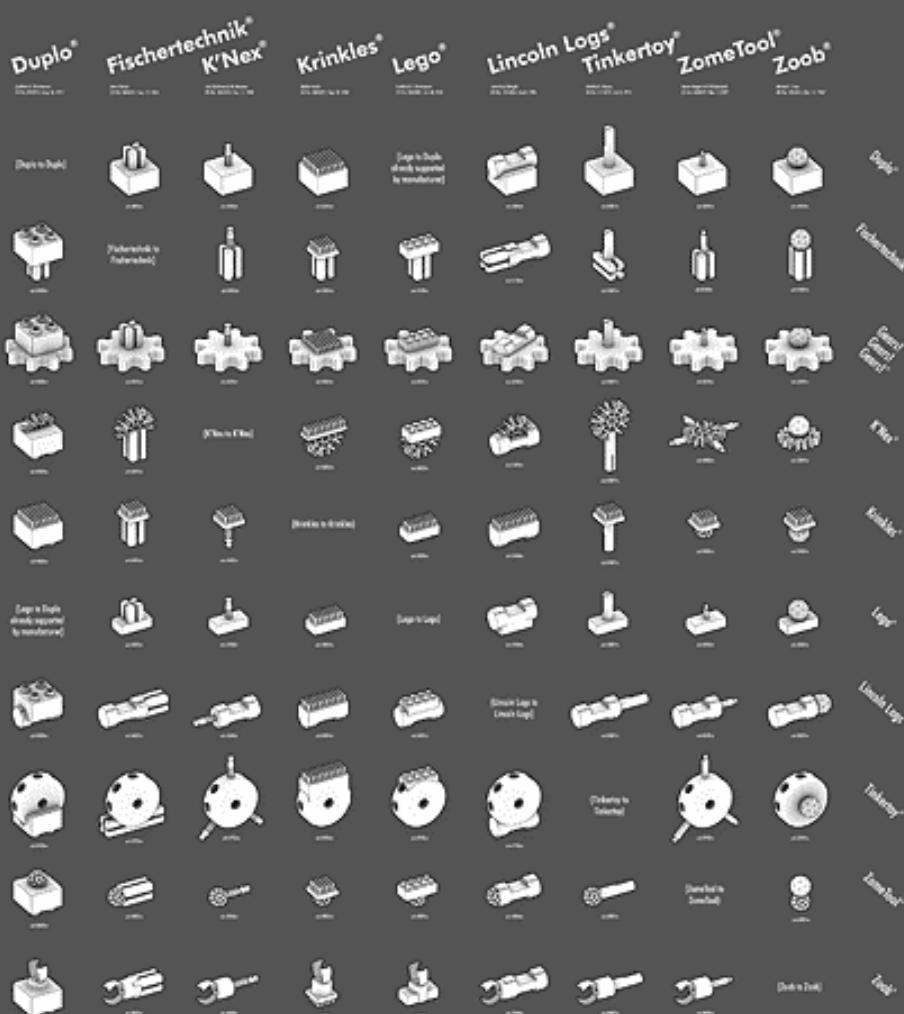






## FREE UNIVERSAL CONSTRUCTION KIT

The F.U.C.K. Lab and its fully open source the Free Universal Construction Kit, a collection of simple blocks that enable complete interactivity between "lego" style children's construction tools. By allowing any piece to go to any other, the kit encourages new forms of interplay between children and objects, extending the life of playthings and encouraging new forms of learning for kids. The Kit consists of 1000+ pieces, 20 models, 200+ parts, and is available for free download and after assembly can be 3D printed and personalized by personal fabrication systems. >>> For more information, please see: <http://fucklab.com/free-universal-construction-kit>

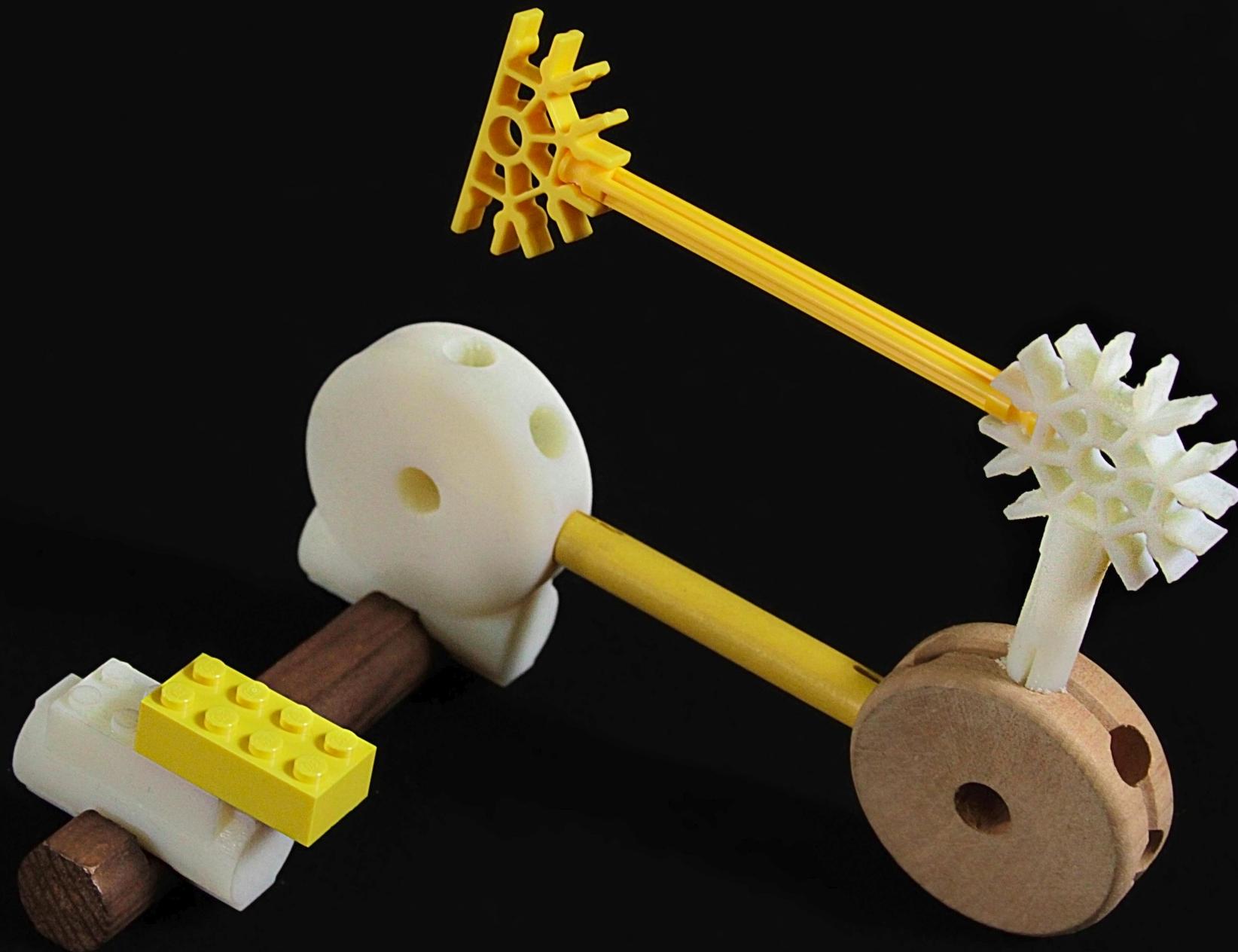


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# Craft $\leftrightarrow$ Tech

Start with = 0

Rule 1 = Replace 0 with 0:0:

Rule 2 = Replace : with :0:

1) 0

2) 0:0:

3) 0:0::0:0:0::0:

4) 0:0::0:0:0:0::0:0:0::0:0:0::0:0:0::0:0:0::0:











Dr Ellen Harlizius-Klück:  
Centre for Textile Research der Universität Kopenhagen



# Noisebridge

Year 1: Open Hacker House  
<https://noisebridge.net/year1>



October marks the one year anniversary of a physical space for your favorite hackerspace! Come help us celebrate in our new home and see what we've been up to! LEDs, Cyborgs, 5 Minutes of Fame, Cold Boot Attacks, DIY Musical Performances, OpenEEG, Dark Optics Lab, Brain Machines, Python, oh my!





OPEN  
SOURCE  
SATELLITE  
INITIATIVE





OSSI-1 Satellite finally launched on 19th April 2013 09:00 UTC Time in Baikonur, Kazakhstan.



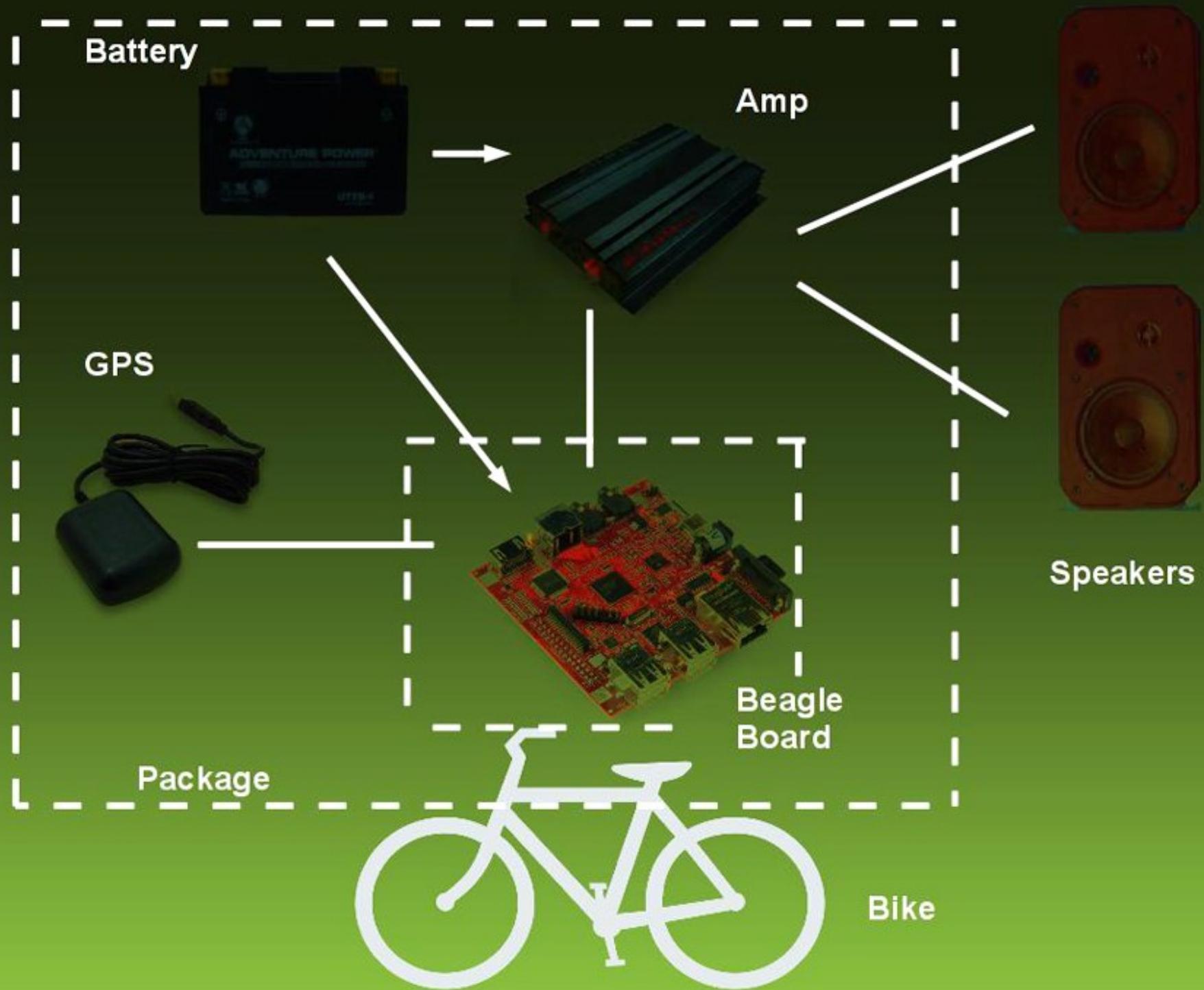
© Reinout Hiel

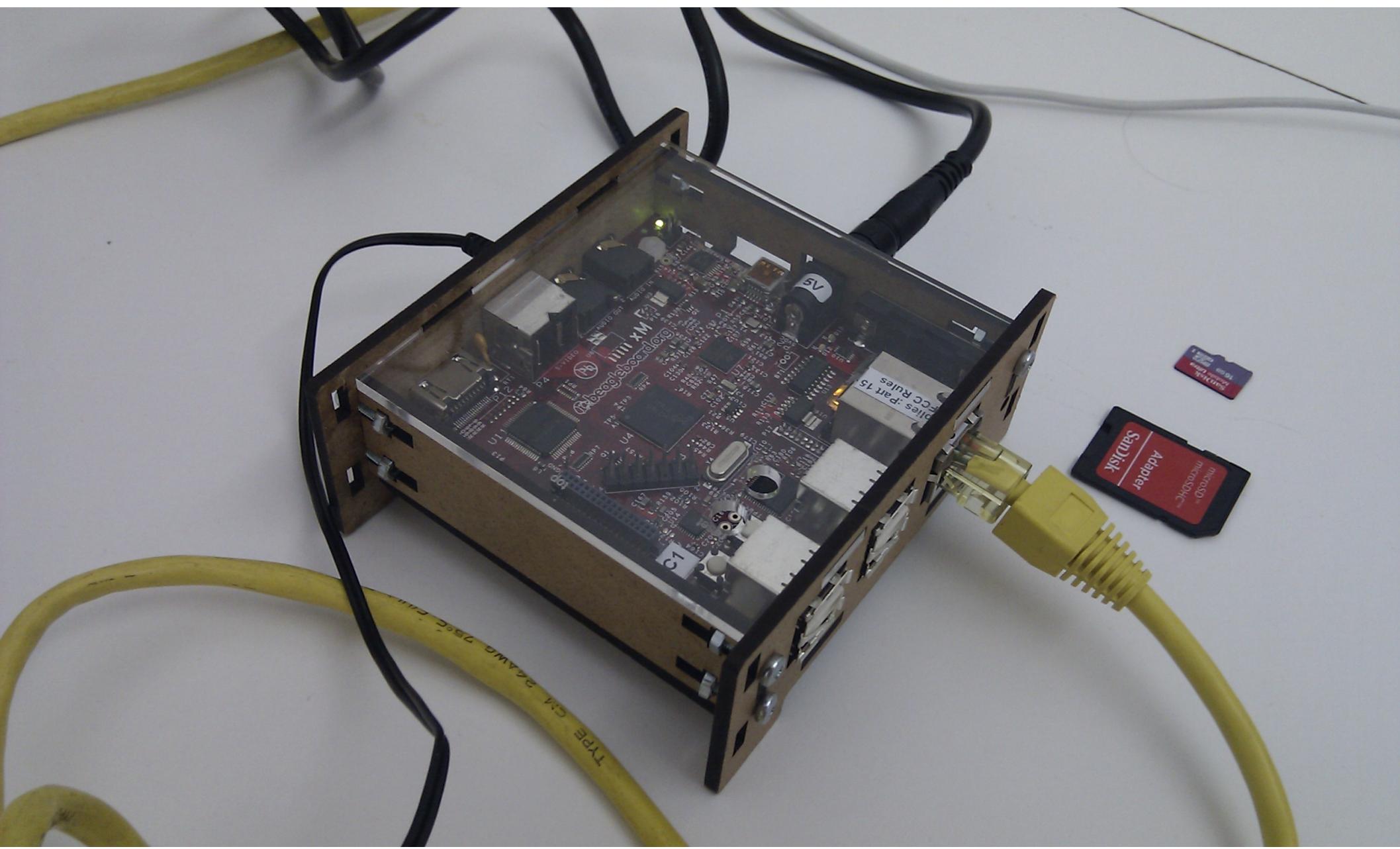


<http://www.kaffematthews.net>

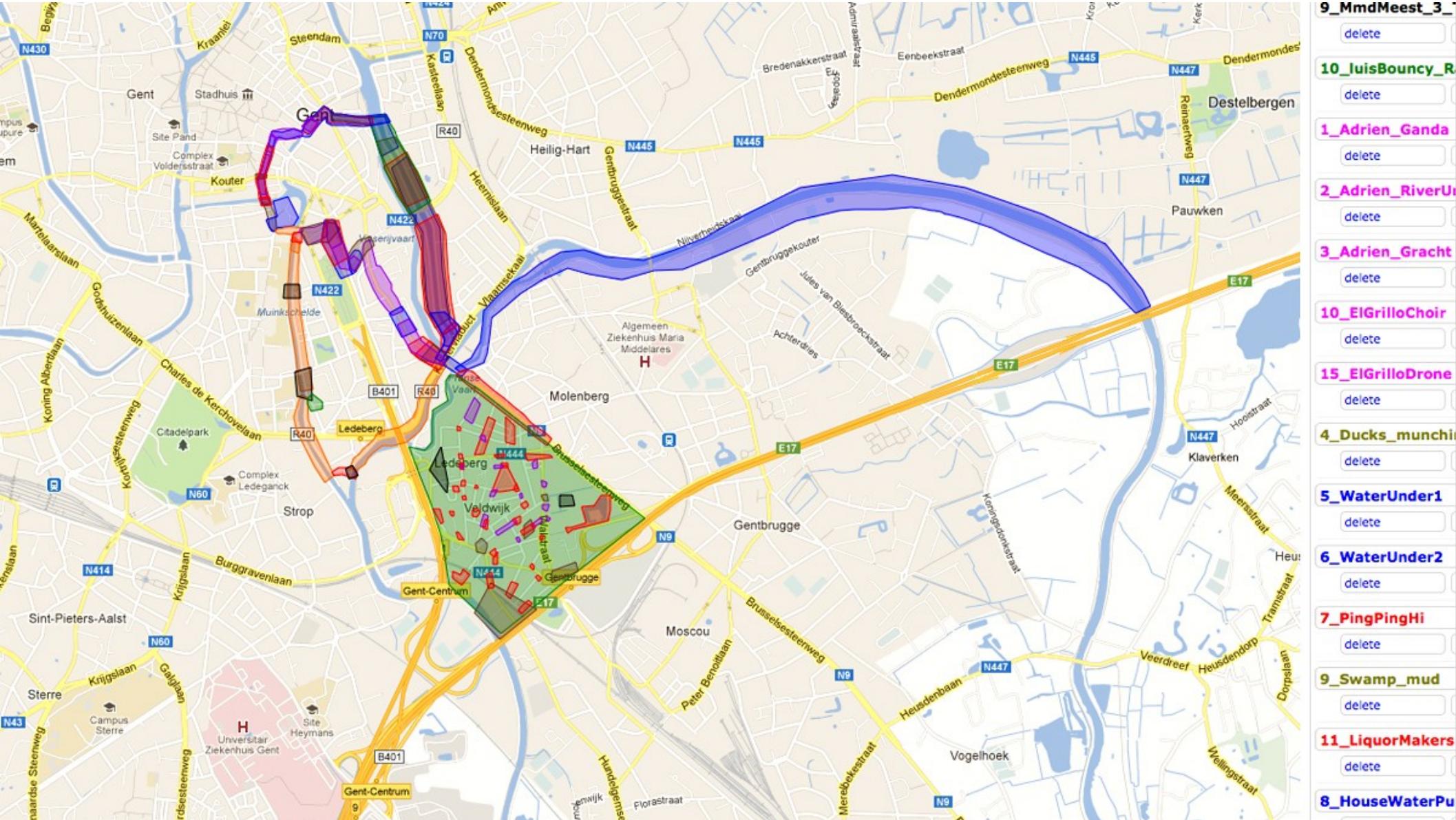




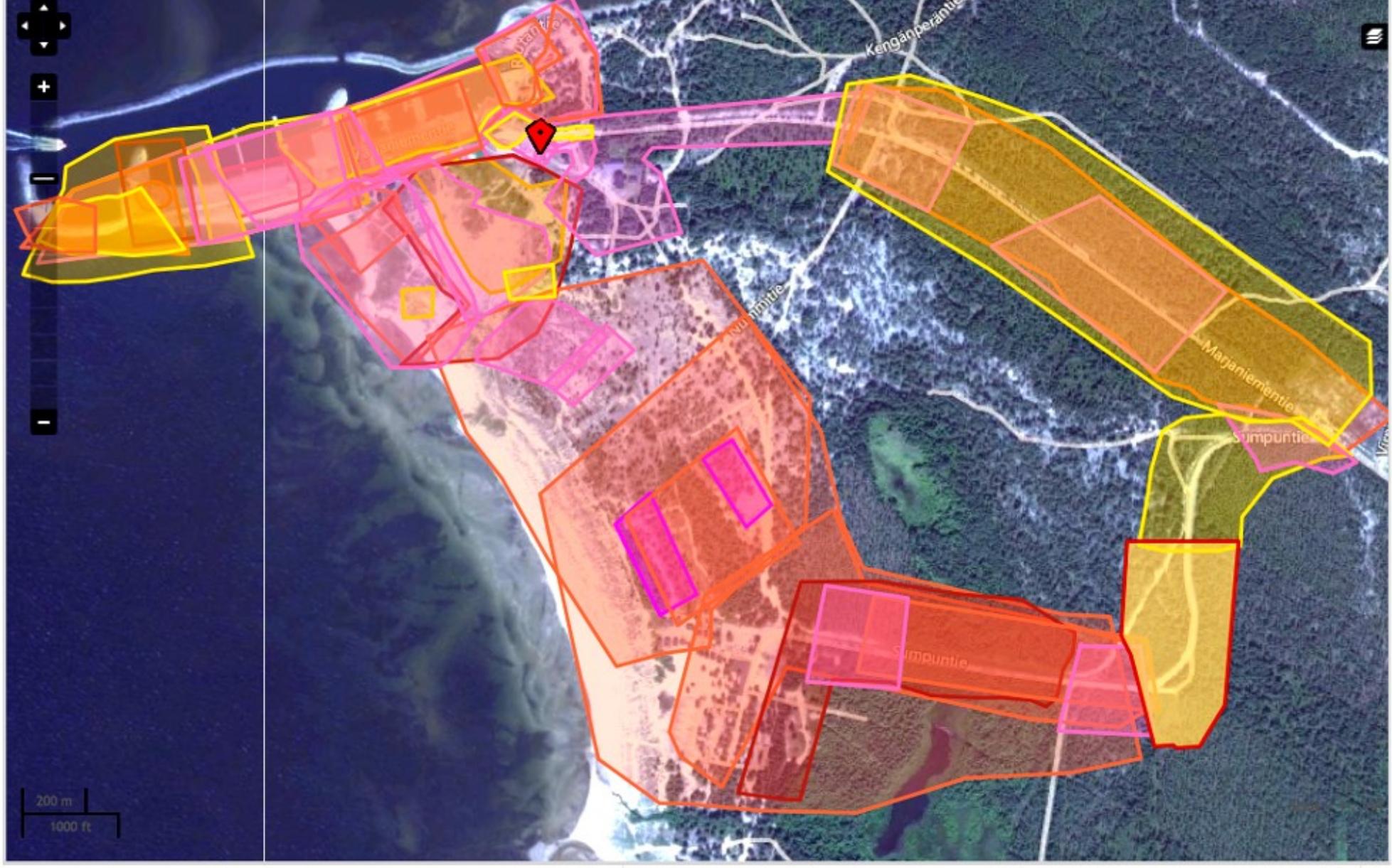








“The swamp that was”: Electrified festival,  
Ghent 2012



Form (Select A Form Type)

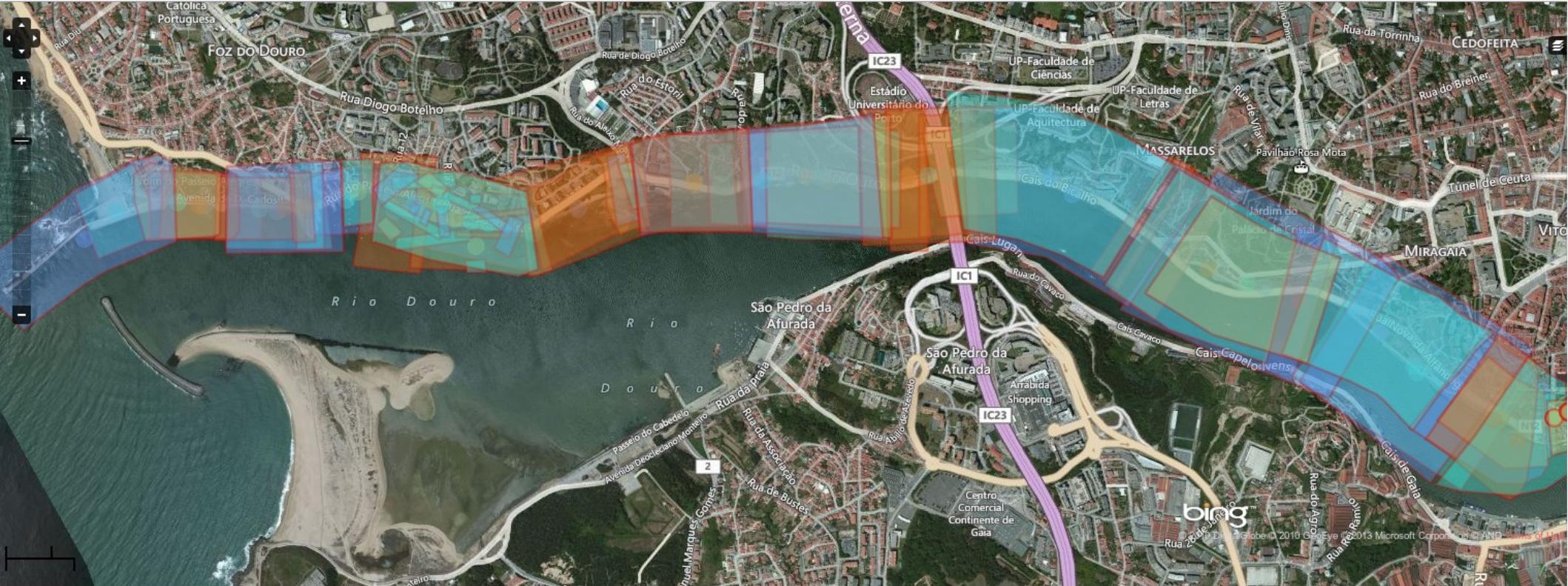


DELETE LAST

DELETE SELECTED

CLEAR MAP

'The Marja trio' – Hailuoto, Finland 2013  
<http://www.haiart.net/>



'Opera FiXi' – Porto, on the rio Douro, Portugal  
2013