

~~hCaptcha: Profits over People and fucking Broken~~

Is the CAPTCHA dead?

Steven Presser

Slides with image descriptions and notes:
pressers.name/anewhope

~~hCaptcha: Profits over People and fucking Broken~~

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Slides with image descriptions and notes:
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Agenda

- Background
 - Assistive Technology
 - CAPTCHAs
- hCaptcha
- The Future

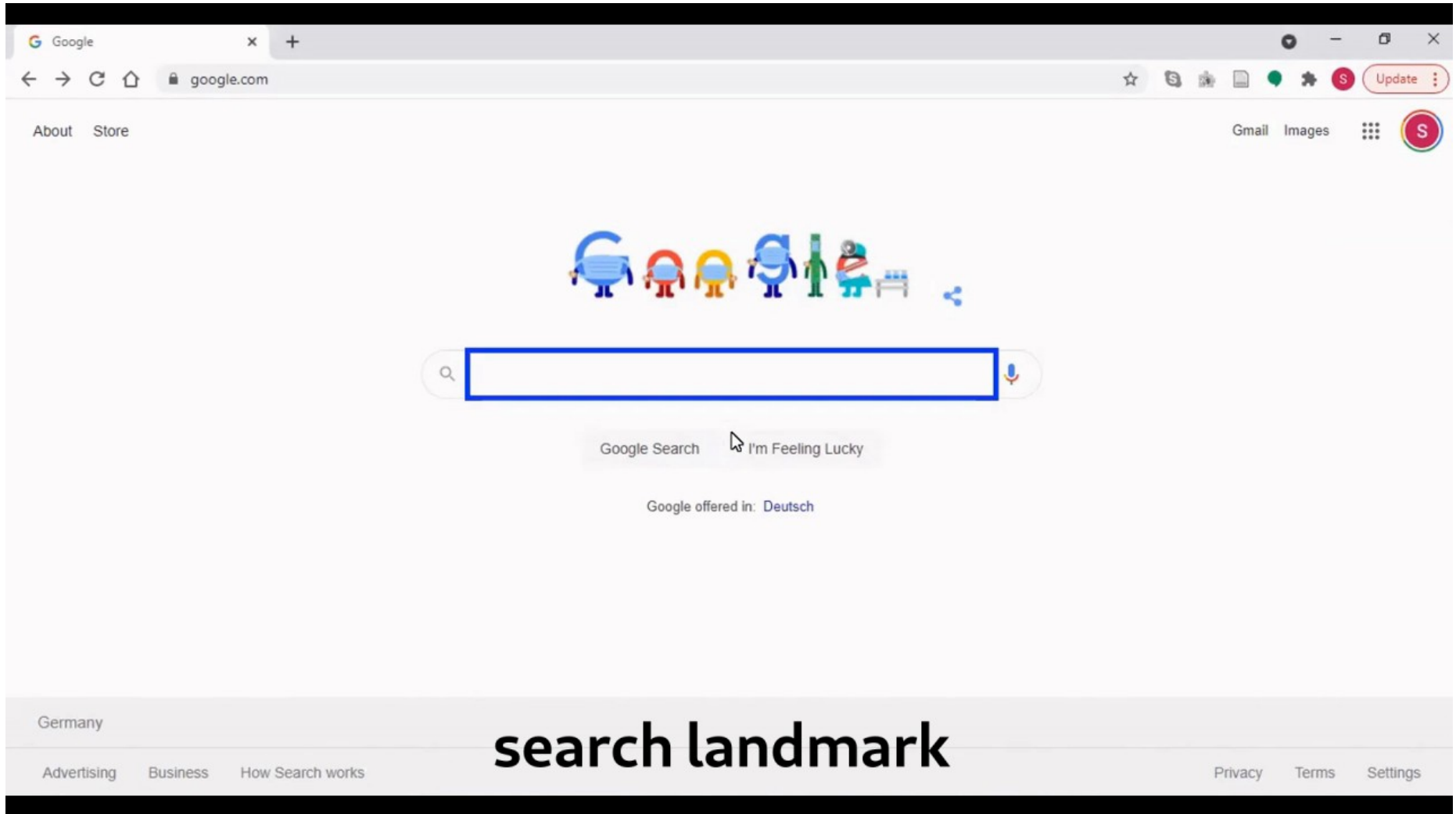
Assistive Technology







search landmark



search landmark

CAPTCHAs

scIt

..was here

Type the two words:



reCAPTCHA™

stop spam.
read books.

Select all squares with
fire hydrants



SKIP



I'm not a robot



reCAPTCHA

[Privacy](#) - [Terms](#)

hCaptcha

hCaptcha is...

Private

Secure

Faster/lower friction

First name

Enter your name

Your favorite vegetable

☐ Eggplant

☐ Carrot



I am human



hCaptcha

[Privacy](#) - [Terms](#)

Please click each image
containing a boat

If there are None, click Skip



EN



Next

Please click each image
containing a boat

If there are None, click Skip



EN



Verify



I am human



hCaptcha

[Privacy](#) - [Terms](#)

First name

Your favorite vegetable

☐ Eggplant

☐ Carrot



I am human



hCaptcha

[Privacy](#) - [Terms](#)

Please click each image
containing a boat

If there are None, click Skip



EN



Next

Accessibility

Report Image

Report Bug

Information





Sign Up For hCaptcha Accessibility Access

Email

Please click Submit and then check
your email. Note our terms and
conditions below.

By entering your email to sign up, you agree to
our Terms and to receive service-related emails
from us. We will never use your email for any
other purpose than enabling accessibility access
and preventing abuse.

Submit



Welcome to hCaptcha Accessibility!

Please click here to log in to hCaptcha.

Get Accessibility Cookie

This will let you set a cookie that enables you to skip requests for hCaptcha challenges.

Save this email or bookmark the link above, then open it and click the link again in order to refresh the cookie if you start to see challenges again.

Please note that the number of requests per day is limited, and your IP and account will be banned in the event of abuse.

Please email support@hcaptcha.com if you have any questions or difficulties.



Welcome! Let's get started.

To use hCaptcha as an accessibility user you will need a periodically refreshed cookie.

1 Get

First, set your accessibility cookie.

[Set Cookie](#)

1 Get

First, set your accessibility cookie.

Set Cookie

Cookie set.

First name

Your favorite vegetable

- ☐ Eggplant
- ☐ Carrot



I am human



hCaptcha

[Privacy](#) - [Terms](#)



I am human



hCaptcha
[Privacy](#) - [Terms](#)

hCaptcha is...

Private

Secure

~~Faster/lower friction~~ ... except for
people with

hCaptcha is...

Privacy



Welcome! Let's get started.

hCaptcha is...

~~Private~~ ... except for people
with disabilities?
Secure

~~Faster/lower friction~~ ... except for
people with

Security

hCaptcha is...

~~Private~~ ... except for people
with disabilities?
~~Secure~~ ...

?
~~Faster/lower friction~~ ... except for
people with

- A) When the user clicks a button
- B) When the user enters their email
- C) When the user opens a link in an email
- D) Whenever – check the User-Agent



Sign Up For hCaptcha Accessibility Access

Email

Please click Submit and then check your email. Note our terms and conditions below.

By entering your email to sign up, you agree to our Terms and to receive service-related emails from us. We will never use your email for any other purpose than enabling accessibility access and preventing abuse.

```
ubuntu@ip-10-0-0-4:~/handicaptcha$ ./handicaptcha.py --platform aws --max-count
1 --outfile ~/handicaptcha.out --domain handicaptcha.com --period 1
My Instance ID is i-0d3ad318b7df7203a
Outbound nic: {'Attachment': {'AttachTime': datetime.datetime(2021, 5, 23, 10,
12, 3, tzinfo=tzlocal()), 'AttachmentId': 'eni-attach-061677dac4f4472ce', 'Dele
teOnTermination': False, 'DeviceIndex': 1, 'Status': 'attached', 'NetworkCardInde
x': 0}, 'Description': 'handicaptcha-outbound', 'Groups': [{'GroupName': 'default', 'GroupId': 'sg-0769805beeb15114c'}], 'Ipv6Addresses': [], 'MacAddress': '16:
c4:25:1d:80:23', 'NetworkInterfaceId': 'eni-0523d2617bf86176b', 'OwnerId': '3767
11111100', 'PrivateIpAddress': '10.0.0.6', 'PrivateIpAddresses': [{'Primary': Tr
ue, 'PrivateIpAddress': '10.0.0.6'}], 'SourceDestCheck': True, 'Status': 'In-use', 'SubnetId': 'subnet-0e293535a55a762ed', 'VpcId': 'vpc-0be5c9416fde1d358', 'In
terfaceType': 'interface'}
starting up on 0.0.0.0 port 2525
Server started
{'AssociationId': 'elpassoc-0d3419cf7fb050ef4', 'ResponseMetadata': {'RequestId':
'893e1f88-bf39-4e09-8c0f-8cda0769718f', 'HTTPStatusCode': 200, 'HTTPHeaders':
{'x-amzn-requestid': '893e1f88-bf39-4e09-8c0f-8cda0769718f', 'cache-control': 'no-cache, no-store', 'strict-transport-security': 'max-age=31536000; includeSubDo
mains', 'content-type': 'text/xml; charset=UTF-8', 'content-length': '295', 'date': 'Sun, 23 May 2021 10:51:10 GMT', 'server': 'AmazonEC2'}, 'RetryAttempts': 0}}
[GFX1-]: glxtest: libEGL initialize failed
[GFX1-]: glxtest: libEGL initialize failed
```

ActivitiesTerminal

May 23 12:54

ip-10-0-0-4:1 (ubuntu) - TigerVNC (on ip-10-0-0-4)

hCaptcha

PlansDocsLabeling ServicesLoginSignup



Privacy Focused

Ad networks see your visitors as the product. hCaptcha doesn't care who your users are, only how likely they are to be malicious. We support initiatives like [Privacy Pass](#), and work hard to balance privacy and security.



Security First

Accuracy is in your interest and ours. We work to give you real data and let you decide how to use it. Other captchas are provided by [Gigantic](#) advertising companies, and blocking bots reduces their revenue.



Better User Experience

Sophisticated machine learning models are used to determine humanity. This lets us require less annoying tasks from users and take less of their time in doing so, while still producing useful labeled data.

First name

Enter your name

Your favorite vegetable

☐ Eggplant

☐ Carrot

☒ I am human



hCaptcha
Privacy - Terms

←Try it out

hCaptcha provides simple, easy, and reliable bot detection while being trivial for humans to solve.

Get hCaptcha

ubuntu@ip-10-0-0-4: ~/handicaptcha

Cookie jar:
[[{'id': 6, 'originAttributes': '', 'name': 'hc_accessibility', 'value': '2dcpsAeCDH4Q3yNBBBLSLcUjb01M01jx3LGNJrCrBpVgX+uWA4BqEnrk3M86BJRY985QDTb56j6jcPqzw2u2pXEBR0NLqw8+W7vgd0L08zr2ngcOVm0eylnrurlbq5JIMZka01WNAsSfvcWCxIz7aDXfcU9qsrLhhOuUMXIhbz1coKCBI4p2aAvrV87vc0nldpEqHmxt0HgwPNDRM9h7V0XLSewezfNOM1hg64DQZ6WB5MXESnBQSVV05+X6fgYf8H3LRM/cAFteDAv7LMWF1KnJk0Aaj7Jf2kDR+c/wa2dP44fuadyLpWzBB7No2wZBn+8auGAPN7jZcB3K7/hhm3c9bqc1dpPElEhj2rBwWj26ftweIJmbTPWKAfEOe6AapevYvy9yCledM1PF/0EMskor3FyFcRam0Q05TrG604dzTfPvjY5QdRb2W5IP2E74QKMGxkZFrg5uatfQ==sT/lfAdafU+g3mlf', 'host': '.hcaptcha.com', 'path': '/', 'expiry': 1621810445, 'lastAccessed': 1621767245609413, 'creationTime': 1621767245609413, 'isSecure': 1, 'isHttpOnly': 0, 'inBrowserElement': 0, 'sameSite': 0, 'rawSameSite': 0, 'schemeMap': 2}], {'id': 8, 'originAttributes': '', 'name': 'session', 'value': '1914dfed-3b44-485c-93dd-09daf2f44196', 'host': '.hcaptcha.com', 'path': '/', 'expiry': 1624445645, 'lastAccessed': 1621767245609564, 'creationTime': 1621767223324759, 'isSecure': 1, 'isHttpOnly': 1, 'inBrowserElement': 0, 'sameSite': 0, 'rawSameSite': 0, 'schemeMap': 2}]]
[GFX1-]: glxtest: libEGL initialize failed
[GFX1-]: glxtest: libEGL initialize failed
Exiting due to channel error.
Exiting due to channel error.
[GFX1-]: glxtest: libEGL initialize failed
[GFX1-]: glxtest: libEGL initialize failed
Pressing enter to activate captcha

hCaptcha is...

~~Private~~ ... except for people
with disabilities?

~~Secure~~ ... except that it can
be automated

~~Faster/lower friction~~ ... except for
people with









The Bigger Picture







What object can give the time?

WHAT'S
NEXT

20

263S2V

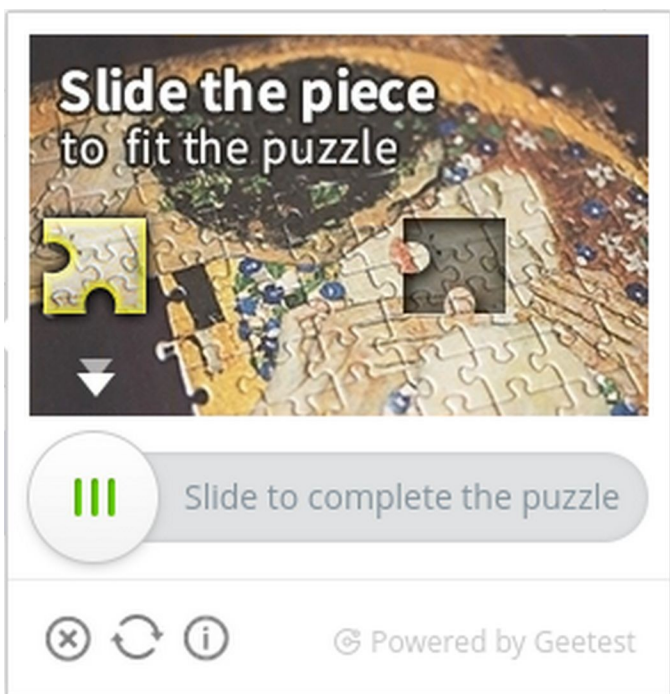
AAXUE

RUNAJIX

5-10-20

~~mwxe2~~

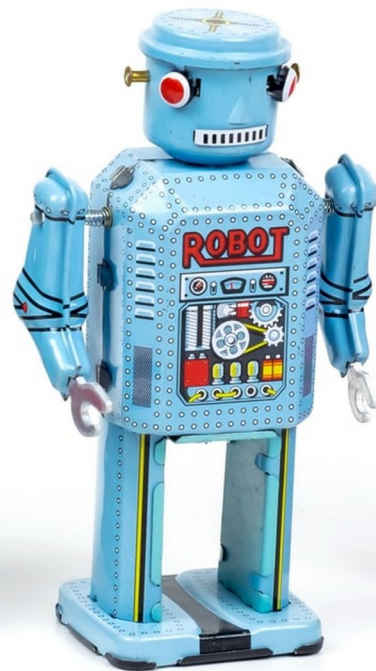
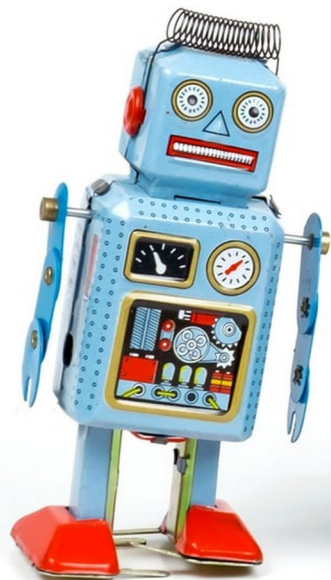
Eps10 vector















 Sign in with Dropbox

 Sign in with Facebook

 Sign in with Github

 Sign in with Google

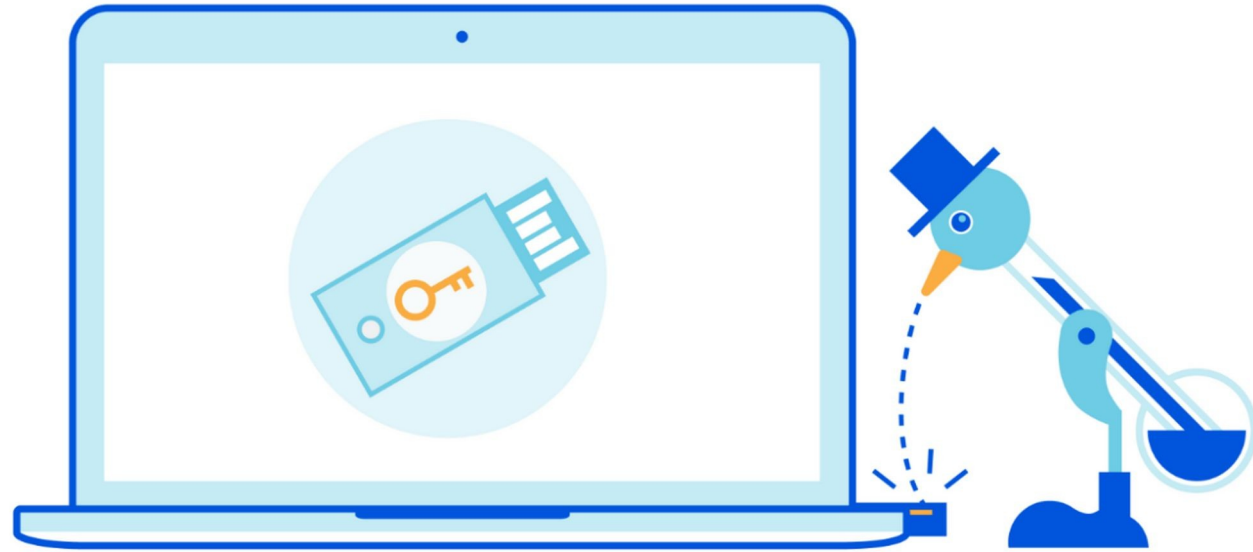
 Sign in with Instagram

 Sign in with LinkedIn

 Sign in with Microsoft

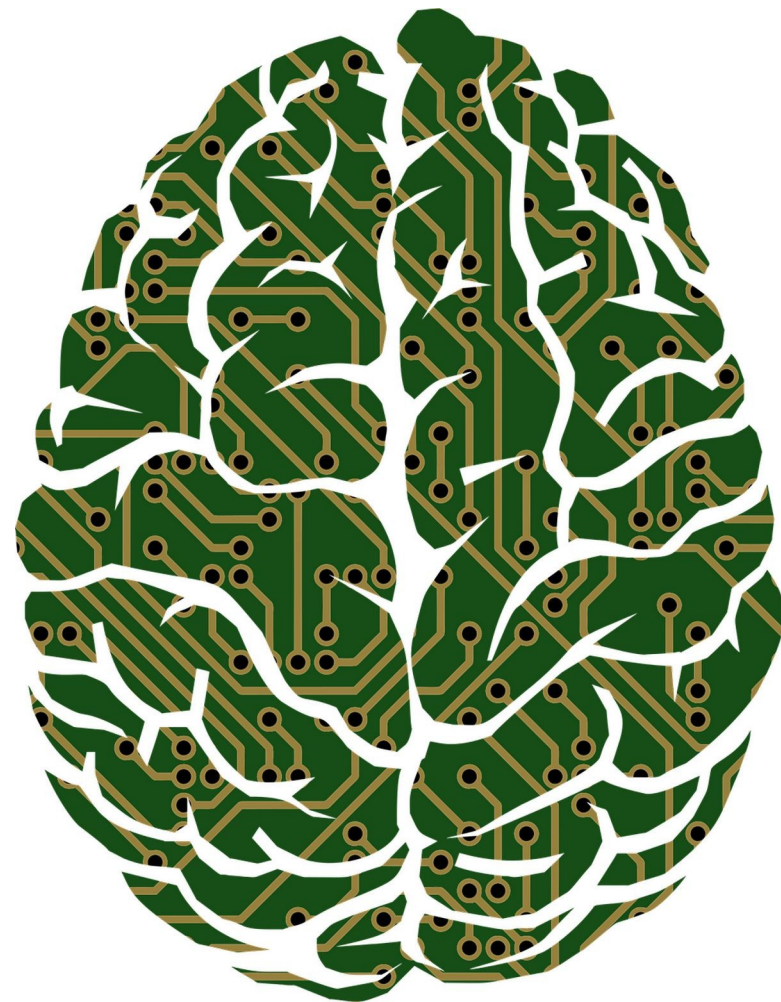
 Sign in with Reddit











Questions?

More information, code, full-length demos:
pressers.name/anewwho