

## PLAN

- What
- Why
- How (When, Where, Who)
- Lessons
- Tools and techniques
- What's next?



## \$ WHOAMI

Malware Researcher at ESET

Passionate about infosec and open source

Did many talks, much lulz and luv for the community

Father of two

@obilodeau

## SHAMELESSPLUG

Hacker Jeopardy Saturday at \$something pm

# WHAT

## Monthly workshop where we work on solving "Capture-the-Flag"\* challenges

http://montrehack.ca

\*: infosec stuff not counter strike

Archives of past challenges on our Website



## Archives

### By date

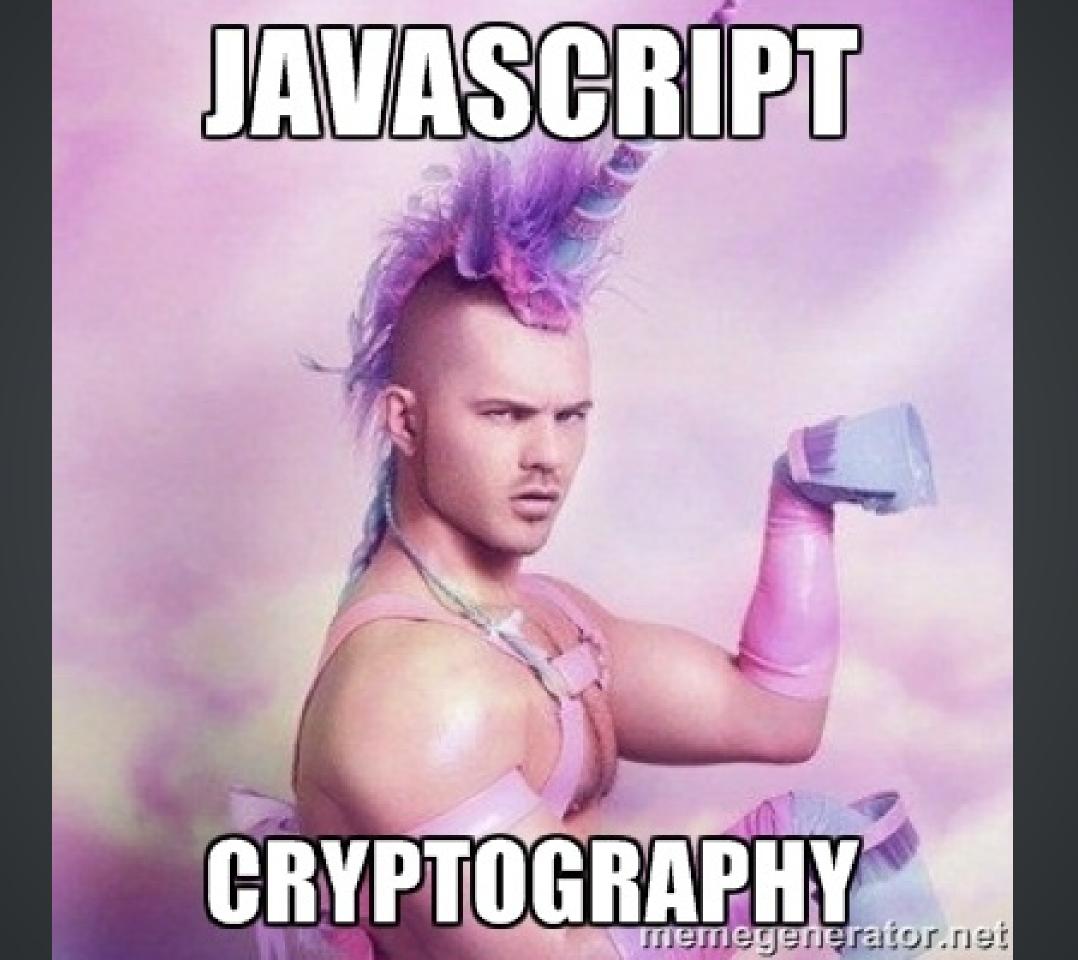
- NorthSec 2015 Warm-up Party!, 18 May 2015
  Network Forensics BKP Riverside 2015, 20 April 2015
  adctf 2014 password-checker, 16 March 2015
  Android Forensics CySCA2014, 16 February 2015
  Microcorruption initiation, 19 January 2015
- >> <u>Brad Oberberg (CSAW Finals 2013)</u>, 15 December 2014
- >> <u>Secure webmail and lost data</u>, 17 November 2014
- >> Web Get \$SHELL, 20 October 2014
- >> NorthSec Smartcards, 15 September 2014
- >> <u>Social meetup / Rencontre sociale</u>, 18 August 2014
- >> NorthSec Thank You Mr ISP, 19 May 2014
- >> NorthSec 2014 Pre-Party!, 21 April 2014
- >> <u>Boston Key Party Reverse Engineering</u>, 17 March 2014
- >> <u>Hackfest 2013 Web Challenges</u>, 17 February 2014

Android, Crackme, Cryptography, Exploit, Forensic, Hardware, IOS, Linux, Network, Reverse-Engineering, SQL Injection, Steganography and Web

#### Covered International and Local CTFs

Advent Calendar CTF, Boston Key Party, CySCA, CSAW, Hackfest, NorthSec, PlaidCTF, Hack.lu

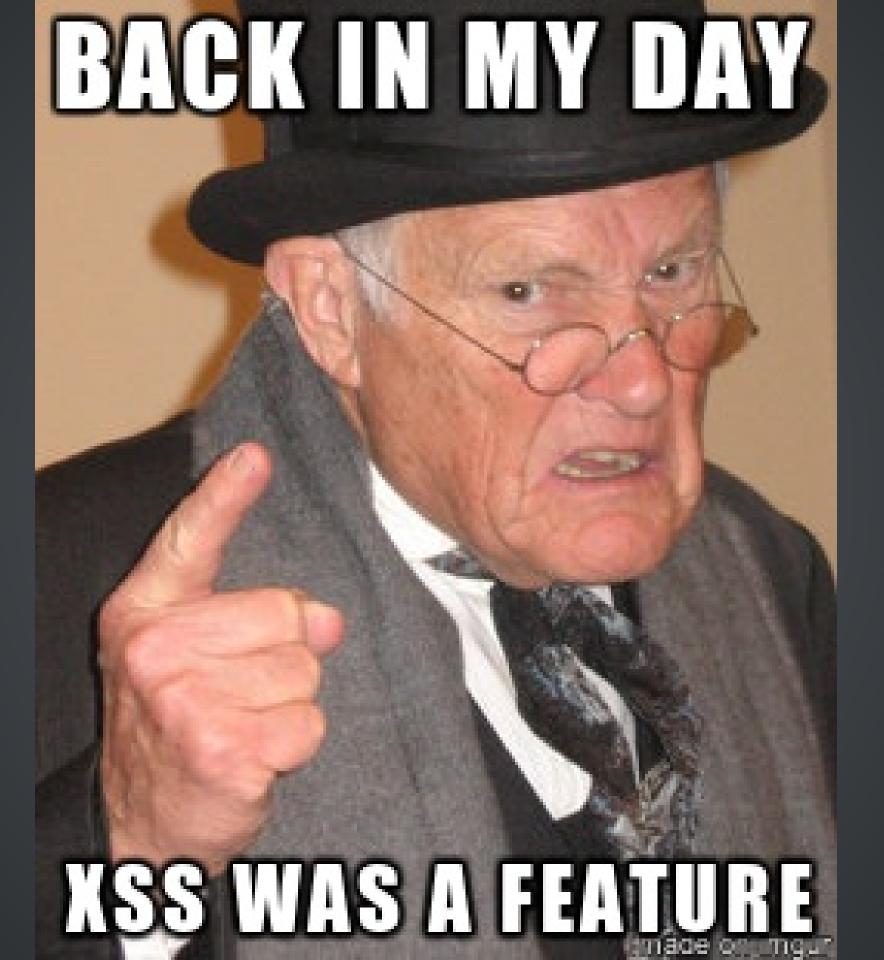
We feature some of the Web's gems in order to present our challenges











```
Jurassic Park, System Security Interface
Version 4.0.5, Alpha E
Ready...
> access main program
access: PERMISSION DENIED.
> access main security
access: PERMISSION DENIED.
> access main program grid
access: PERMISSION DENIED .... AND ....
                   MAGIC WORD!
   DIDN'T SAY THE
   DIDN'T SAY THE
                   MAGIC WORD!
   DIDN'T SAY THE
                   MAGIC WORD!
   DIDN'T SAY THE
                   MAGIC WORD!
YOU
   DIDN'T SAY THE
                   MAGIC WORD!
   DIDN'T SAY THE
                   MAGIC WORD!
   DIDN'T SAY THE
                   MAGIC WORD!
   DIDN'T SAY THE
                   MAGIC WORD!
YOU
                   MAGIC WORD!
   DIDN'T
          SAY THE
   DIDN'T SAY THE
                   MAGIC WORD!
   DIDN'T SAY THE
                   MACTO
```







But montrehack is also...

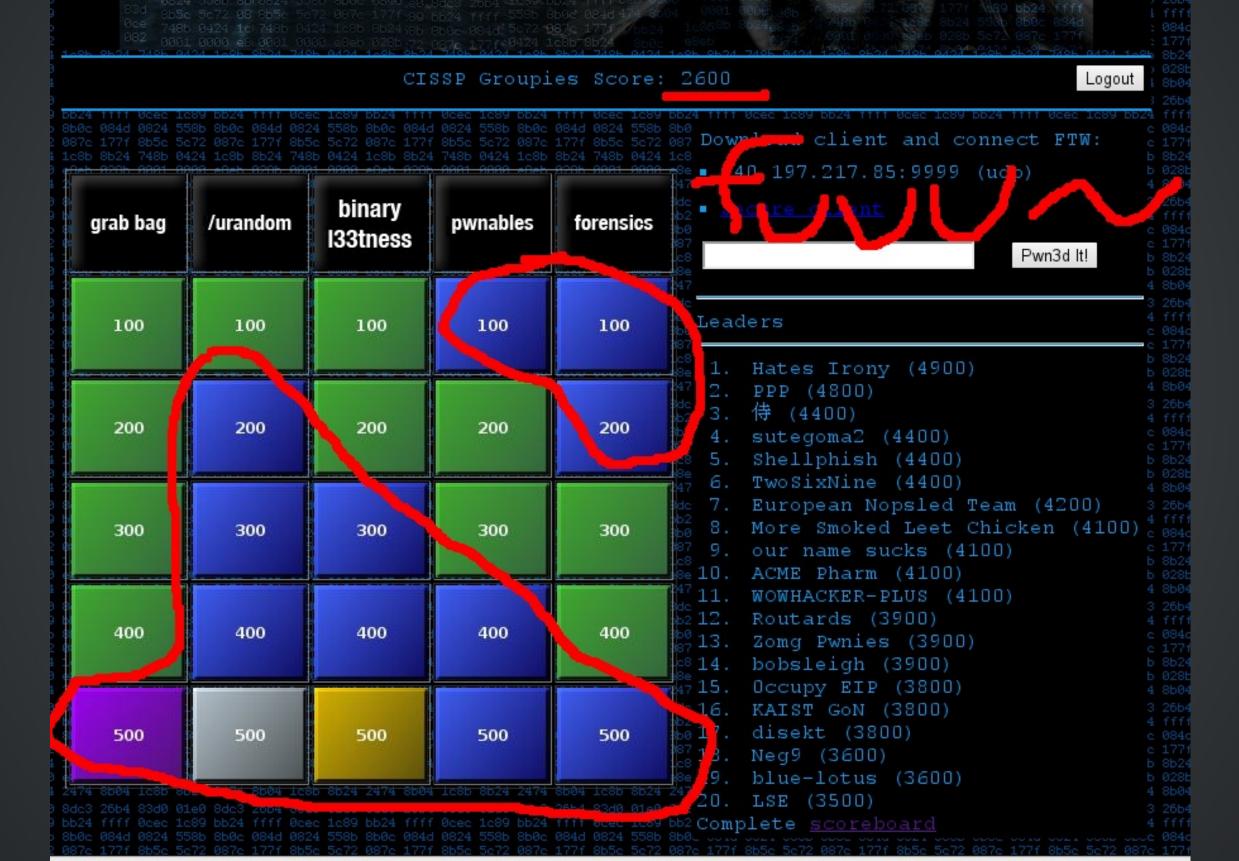


# WHY

Be better at CTF

Because we sucked at Defcon Quals

#### Diutinus Defense Technologies Inc.



We didn't really succeeded at that

## In fact its more about routine and doing

True story bro

# HOW

# Someone proposes a challenge We work on it He presents his solution after 3 hours

We go for beer after

# Participants must bring laptops Hack in ad-hoc teams

Make friends (optional)

## WHEN

## 3rd Monday of every month\*

\*: certain restrictions apply, see website for details

## WHERE

Notman house, UQAM or Google offices

then Benelux

## WHO

Pierre-Marc Bureau, Sebastien Duquette, Marc-Etienne M.Leveillé and myself



#### Alexandre Rimthong for the montrehack name

Past presenters: Taher Azab, Xavier Garceau-Aranda, Pierre-Marc Bureau, Marc-Etienne M.Leveillé, Charles F.Hamilton, Philippe Arteau, Pierre-David Oriol, Marc-André Labonté, Sébastien Lorrain, Mathieu Lavoie, Benjamin Vanheuverzwijn, Sébastien Duquette, Gabriel Tremblay, Jonathan Marcil, Laurent Desaulniers, François Proulx and myself

## A FEW AWARDS SHOULD GO TO

Most montrehack attended without actually working on the challenges

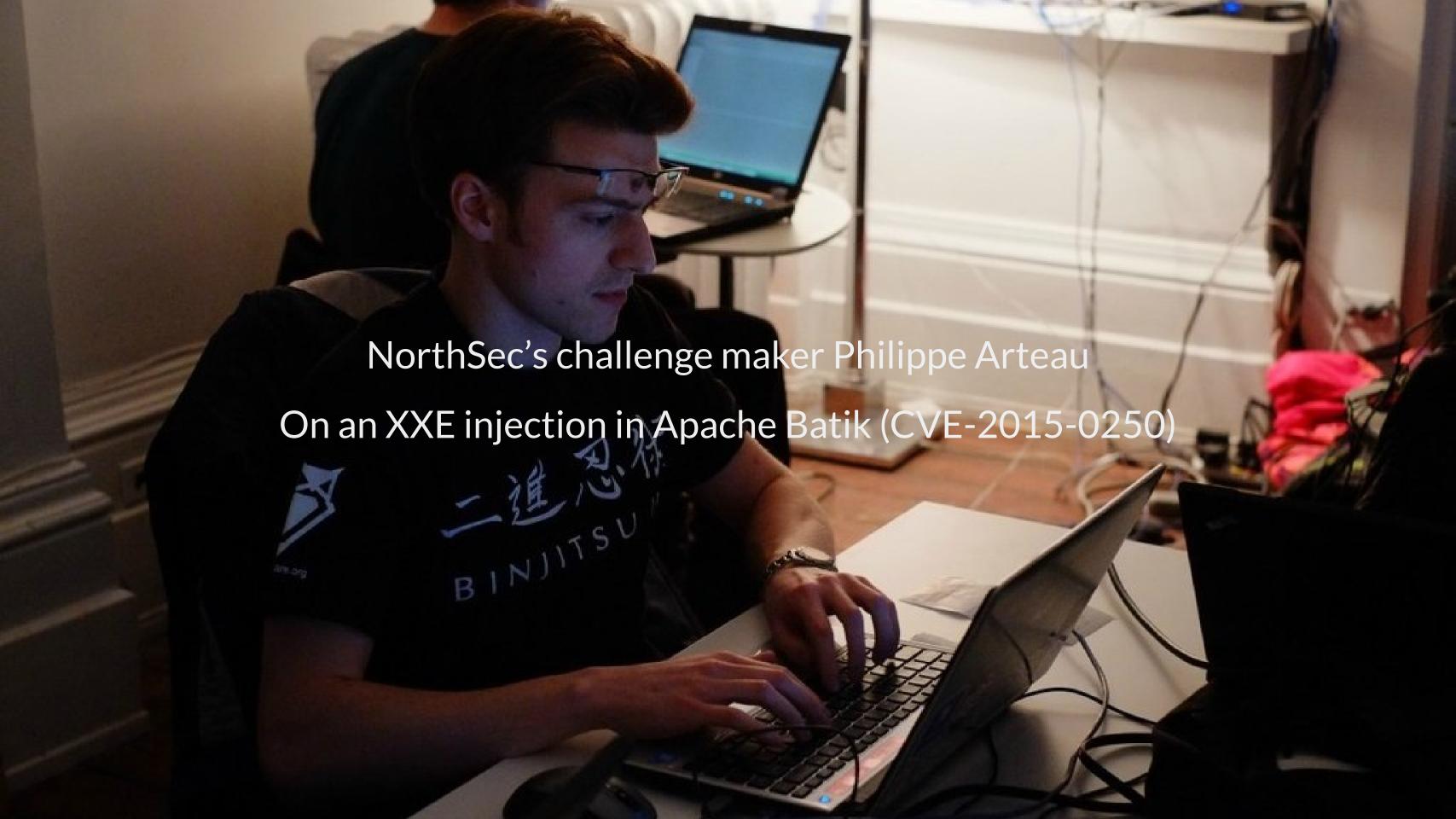


#### Longest challenge explanation

Going 3x over allocated timeslot



Making us secretly exploit a 0-day vulnerability in some library



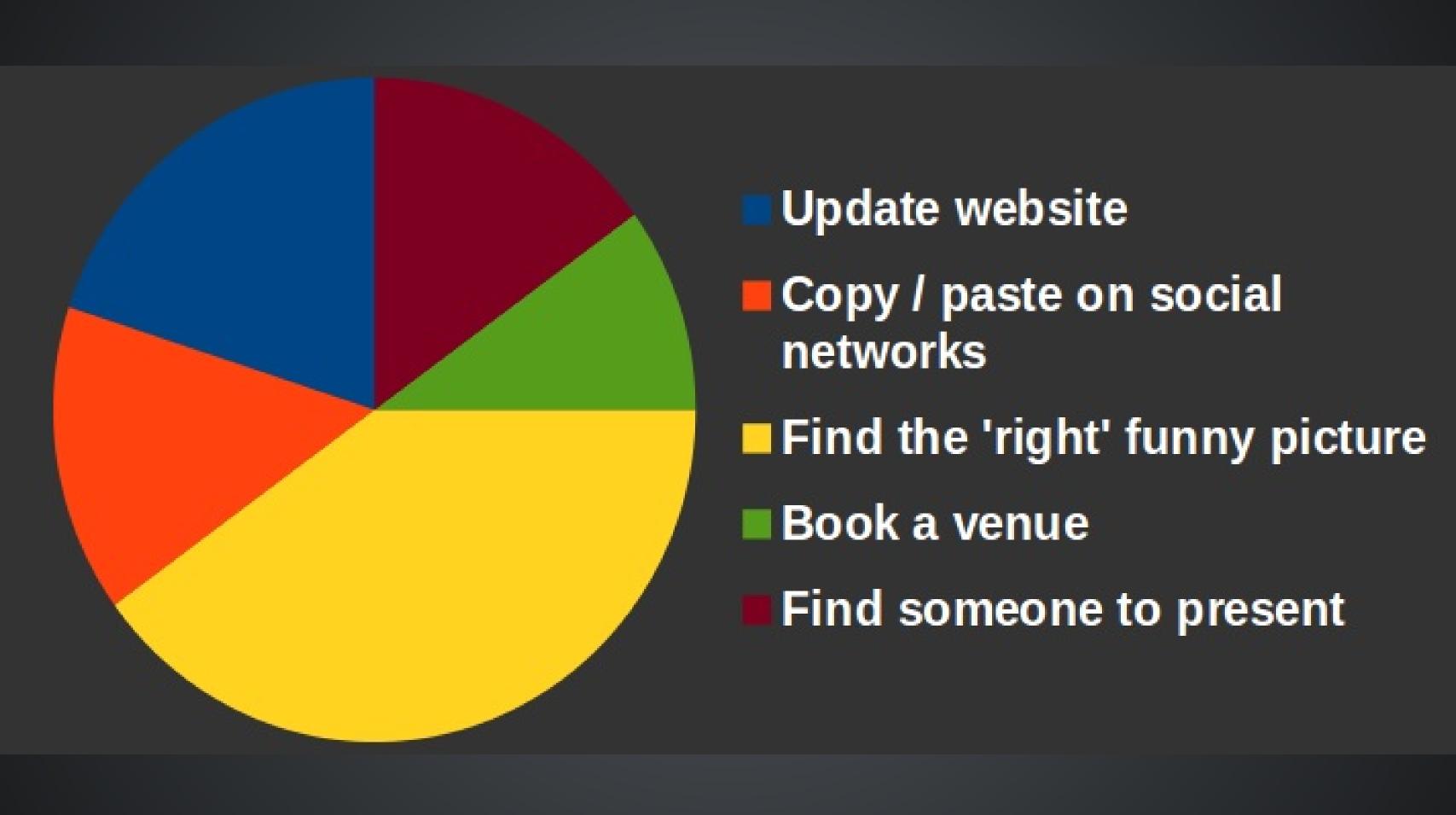
## LESSONS

Co-maintainership doesn't work

We accidentally offended several communities

We're sorry

It takes time



Having checkpoints along a complex challenge is a good thing

### TOOLS AND TECHNIQUES

#### There are no single tools or techniques

The END

#### Learn a scripting language

Accumulate snippets of codes and re-use them, expand them over time

but preferably python3

Use ipython and ipython notebook

No plain gdb fancy .gdbinit or p3da

From time to time try radare2 instead of a pirated IDA Pro

#### Wireshark is da bomb and learn tshark

Especially -T fields -e data and then some piping into python with fileinput module for further processing.

Web: Burp or Owasp ZAP

Use vagrant for disposable VMs

# Learn to use a powerful text-editor like vim, sublime or emacs

Preferably vim

Learn to use the developers tools of your browser

## WHAT'S NEXT?

#### Sponsored by the Benelux for a free beer after the workshop



No breaks this summer

Next month we get a Googler from Seattle

Defcon Quals 2015 challenge: wibbly wobbly timey wimey

### PARTICIPATE!

We want you to come to montrehack

We want you to present at montrehack!

We want you to sponsor montrehack!

Best way: present or create a challenge!

- Mailing list: https://groups.google.com/forum/#!forum/montrehack
- Twitter: https://twitter.com/montrehack
- Other places: facebook, google+
- Getting involved: https://groups.google.com/forum/#!forum/montrehackmeta

You can easily contribute and participate

