

Time-Critical Social Mobilization

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Scalable Cooperation

MIT Media Lab

<http://scalable.media.mit.edu>



DARPA SHREDDER CHALLENGE

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Download Puzzle Files

Click on the links below to access the five Shredder Challenge problems.

PUZZLE



28.8 MB

Estimated*
download time:
8 minutes

PUZZLE



74.6 MB

Estimated*
download time:
7 minutes

PUZZLE



91.0 MB

Estimated*
download time:
8 minutes

PUZZLE



146 MB

Estimated*
download time:
13 minutes

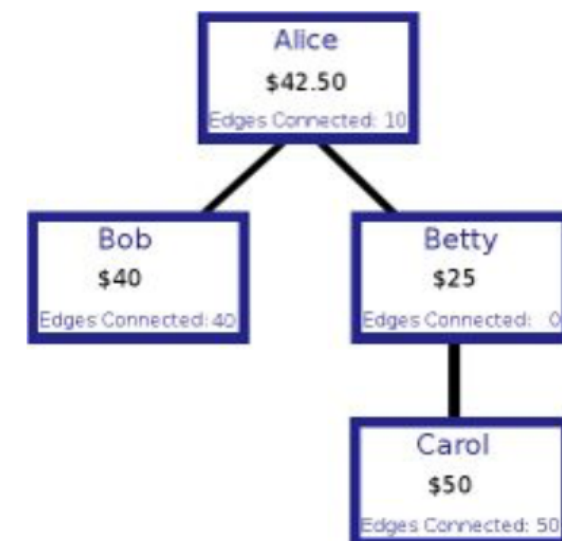
PUZZLE



419 MB

Estimated*
download time:
38 minutes

224, 373, 1115, 2340, 6068 pieces



(b) Query incentive networks, again.

Working on Puzzle 2!

- W Up
- A Left
- S Down
- D Right
- O Rotate Counterclockwise
- E Rotate Clockwise
- N Zoom Out
- M Zoom In
- Hide/Show Chat

THIS DOESN'T
MAKE SENSE!

Julius Caesar?

Despite being captured by 10 pirates, Caesar brought 23 changes to Rome before being awarded with the title Consul. A major of war, he captured the 8 Gallic tribes and fully documented his 24 exploits in a book titled "Commentarii de Bello Gallico." In this novel he describes the creation of the first encryption method used

ENCRYPTED?

Puzzle 1 (6 Nov)

COMRADE,
I DO NOT KNOW THE
IDENTITY OF THAT WHICH
YOU SEEK BUT MY SOURCES
ASSURE ME THAT THE
ANSWER MAY LIE IN THE
TITLE OF A 1937 FILM
DIRECTED BY LITVAK.
GOOD LUCK IN YOUR
HUNT!

COMRADE,
I DO NOT KNOW THE
IDENTITY OF THAT WHICH
YOU SEEK BUT MY SOURCES
ASSURE ME THAT THE
ANSWER MAY LIE IN THE
TITLE OF A 1937 FILM
DIRECTED BY LITVAK.
GOOD LUCK IN YOUR
HUNT!

Puzzle 2 (6 Nov)

THIS DOESN'T
MAKE SENSE!

Julius Caesar?

Despite being captured by 10 pirates, Caesar brought 23 changes to Rome before being awarded with the title Consul. A master of war, he captured the 8 Gallia tribes and fully documented his 24 exploits in a book titled "Commentarii de Bella Gallica." In this novel he describes the creation of the first encryption method used to protect correspondence. After the creation of the First Triumvirate in 18BC, he was awarded the role of dictator for life, started 21 civil wars, and was murdered by as many friends as enemies.

ENCRYPTED?

#'s =
LETTERS!

STREAM
CIPHER!

A B C D E F F G H I J K L M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 (10) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 (23) 1 2 3 4 5 6 7 (8) 1 2 3 4 5 6 7 8 9 10 11 etc

THIS DOESN'T
MAKE SENSE!

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Despite being captured by 10 pirates, Caesar brought 23 changes to Rome before being awarded with the title Consul. A master of war, he captured the 8 Gallia tribes and fully documented his 24 exploits in a book titled "Commentarii de Bella Gallica." In this novel he describes the creation of the first encryption method used to protect correspondence. After the creation of the First Triumvirate in 18BC, he was awarded the role of dictator for life, started 21 civil wars, and was murdered by as many friends as enemies.

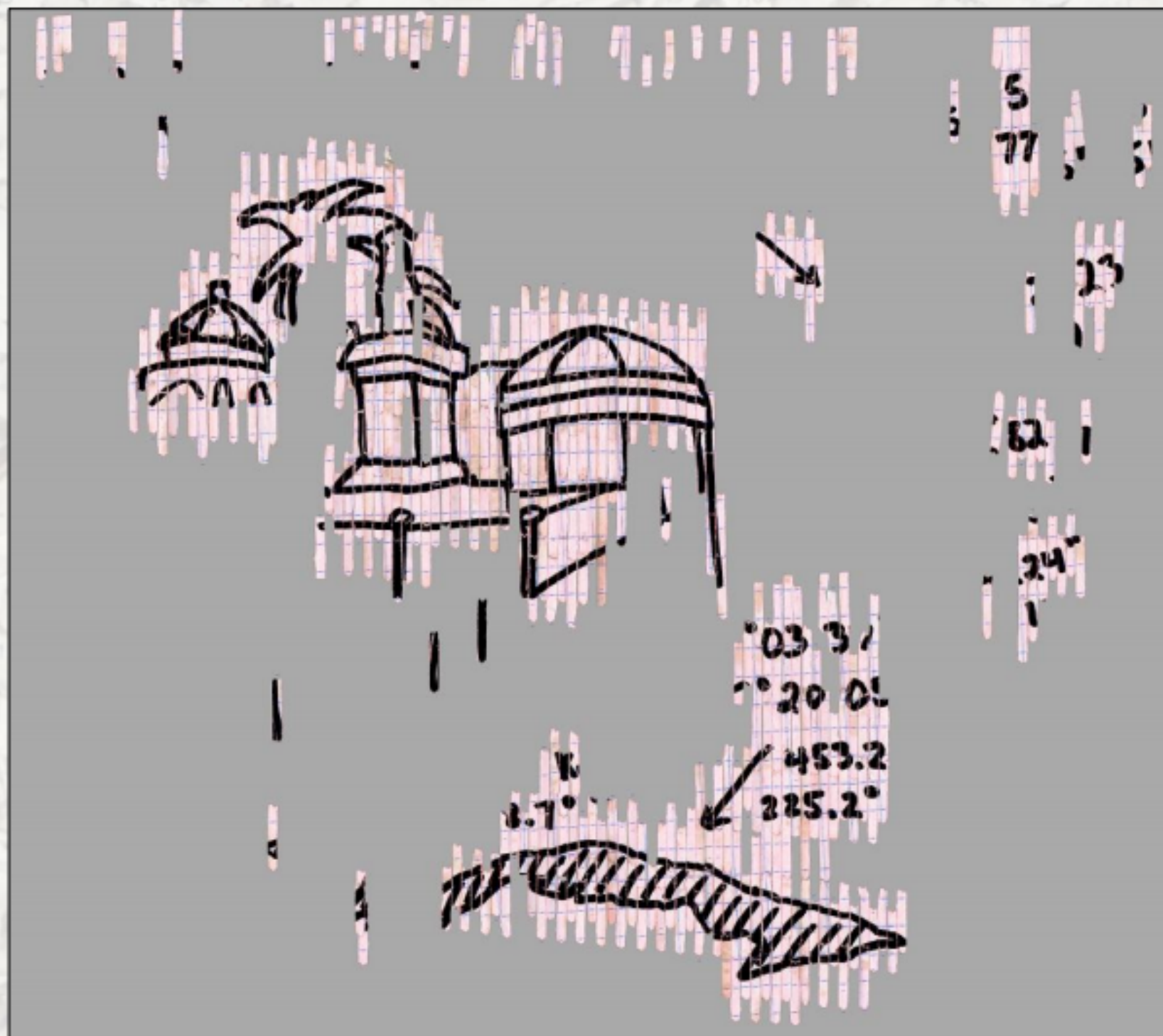
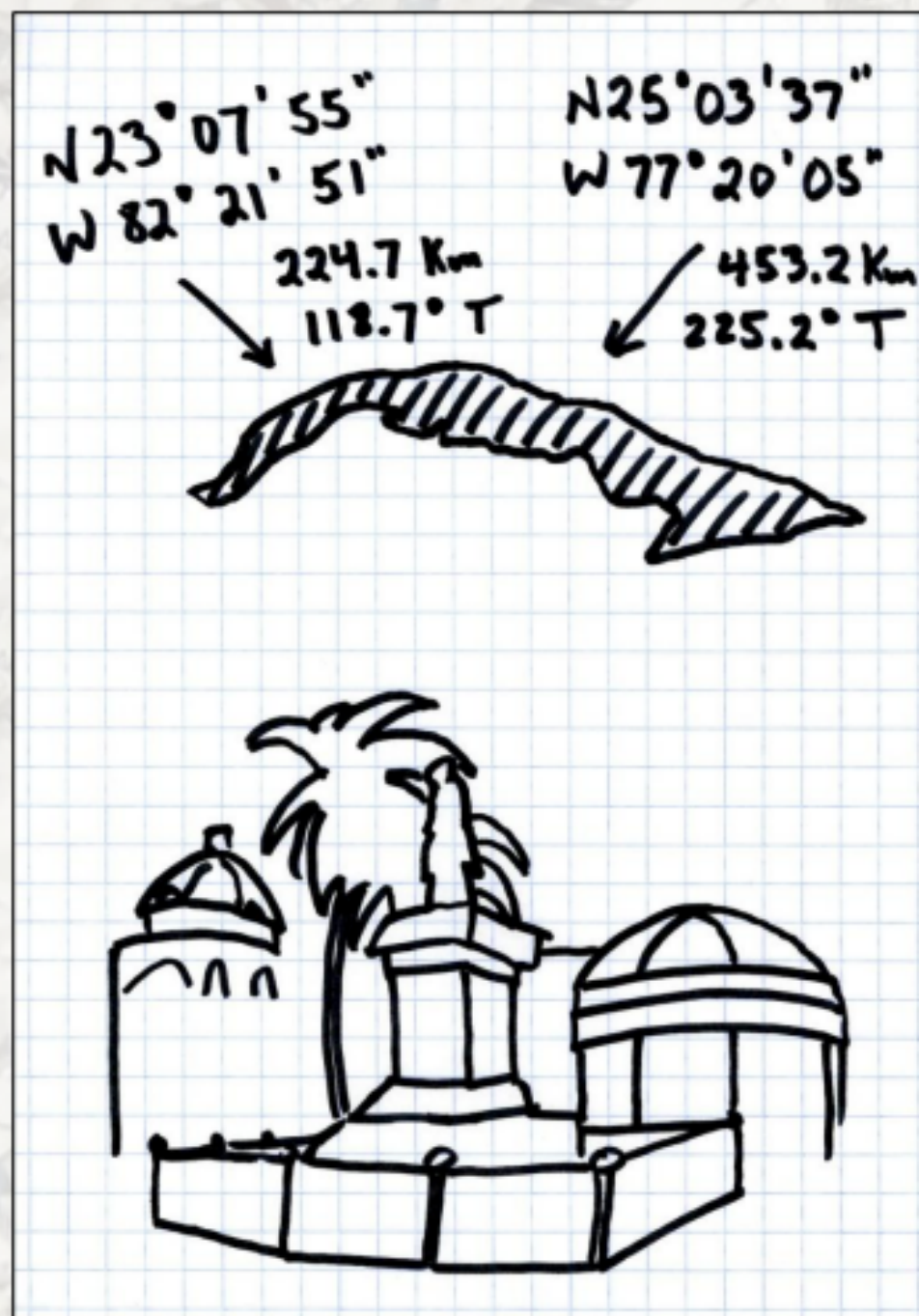
ENCRYPTED?

#'s =
LETTERS!

STREAM
CIPHER!

A B C D E F F G H I J K L M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 (10) 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 (23) 1 2 3 4 5 6 7 (8) 1 2 3 4 5 6 7 8 9 10 11 etc

Puzzle 3 (8 Nov)



Puzzle 4 (21 Nov)

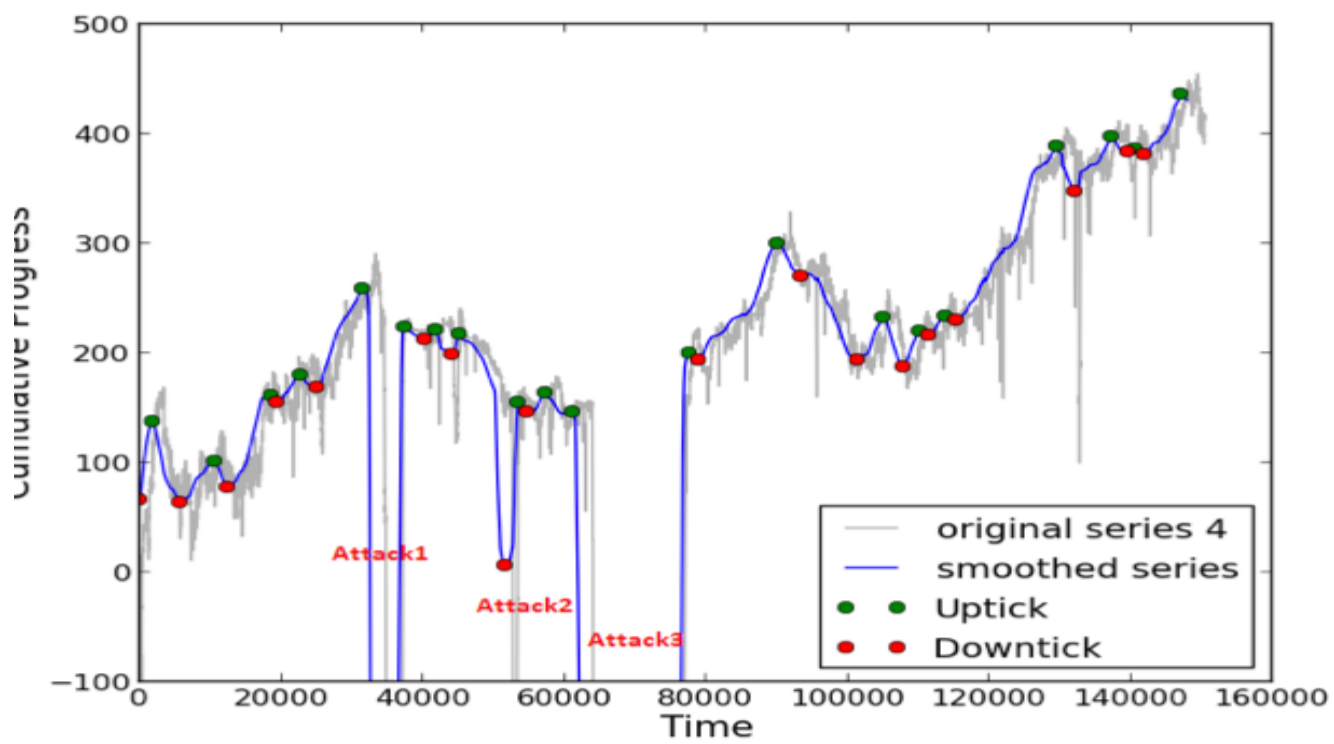
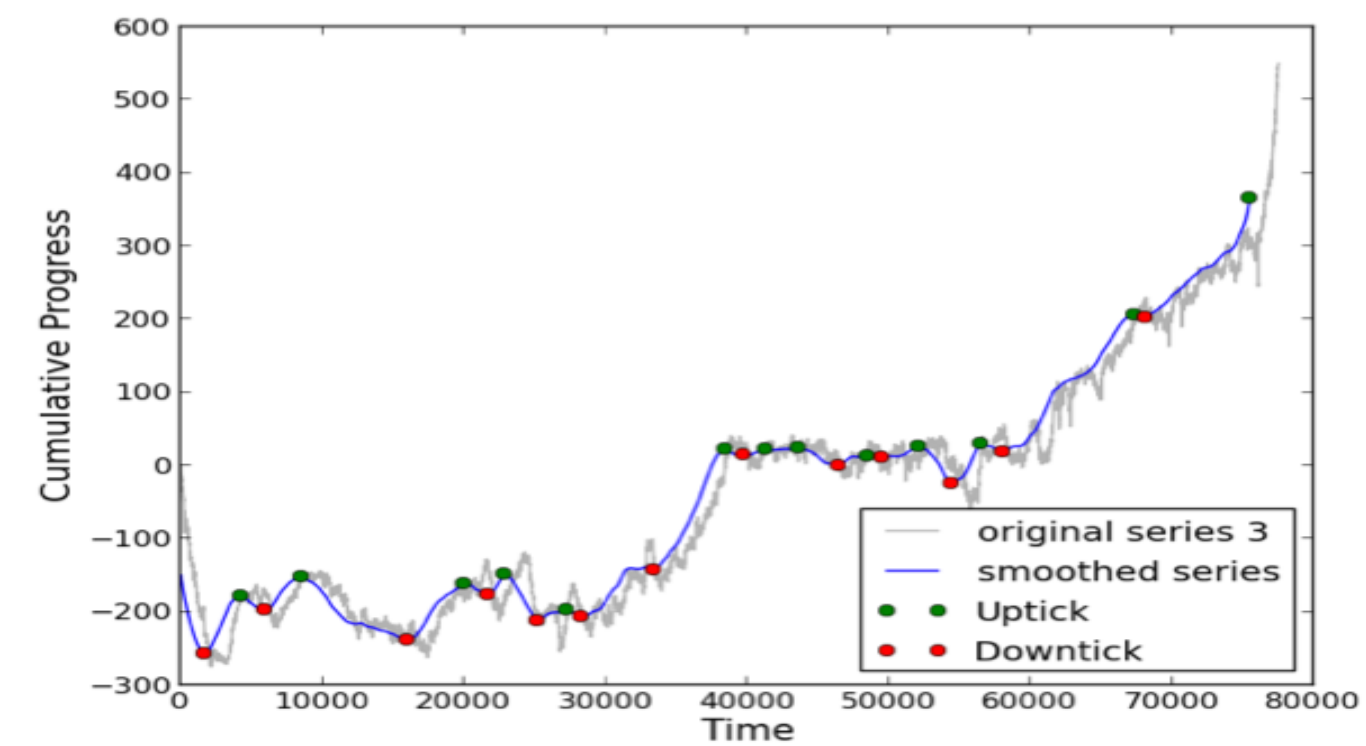
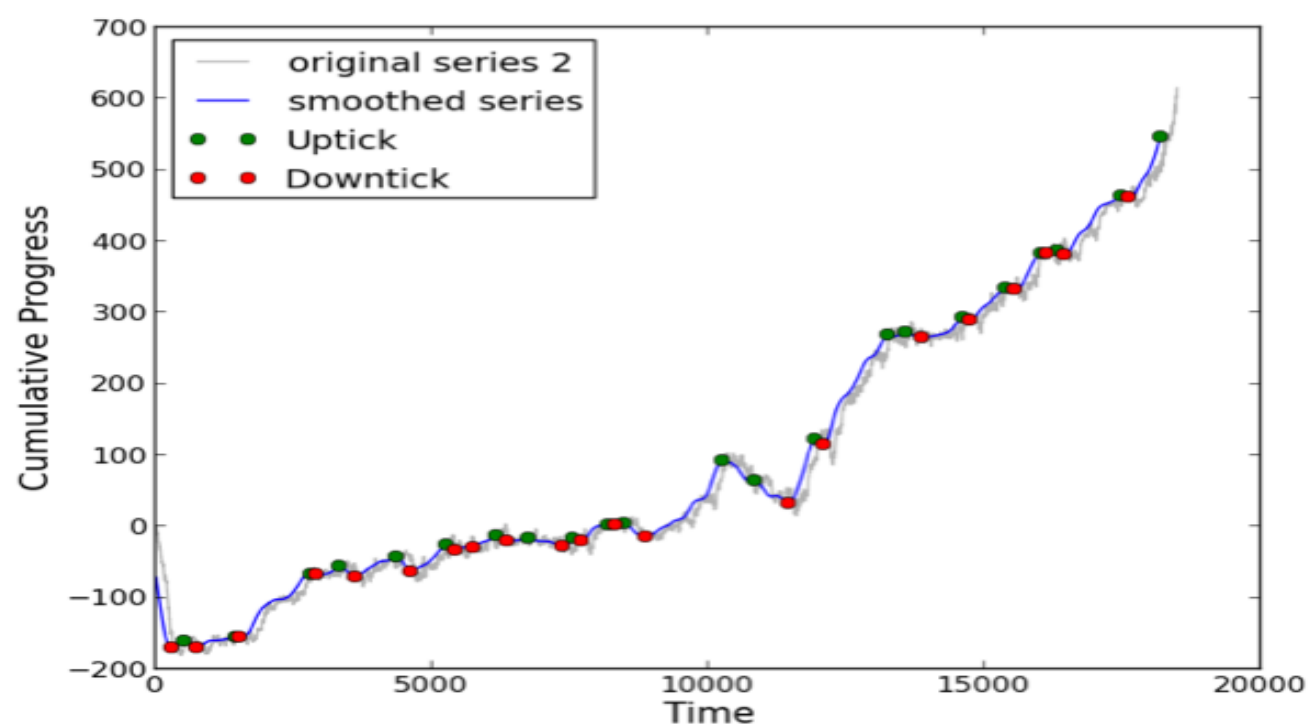
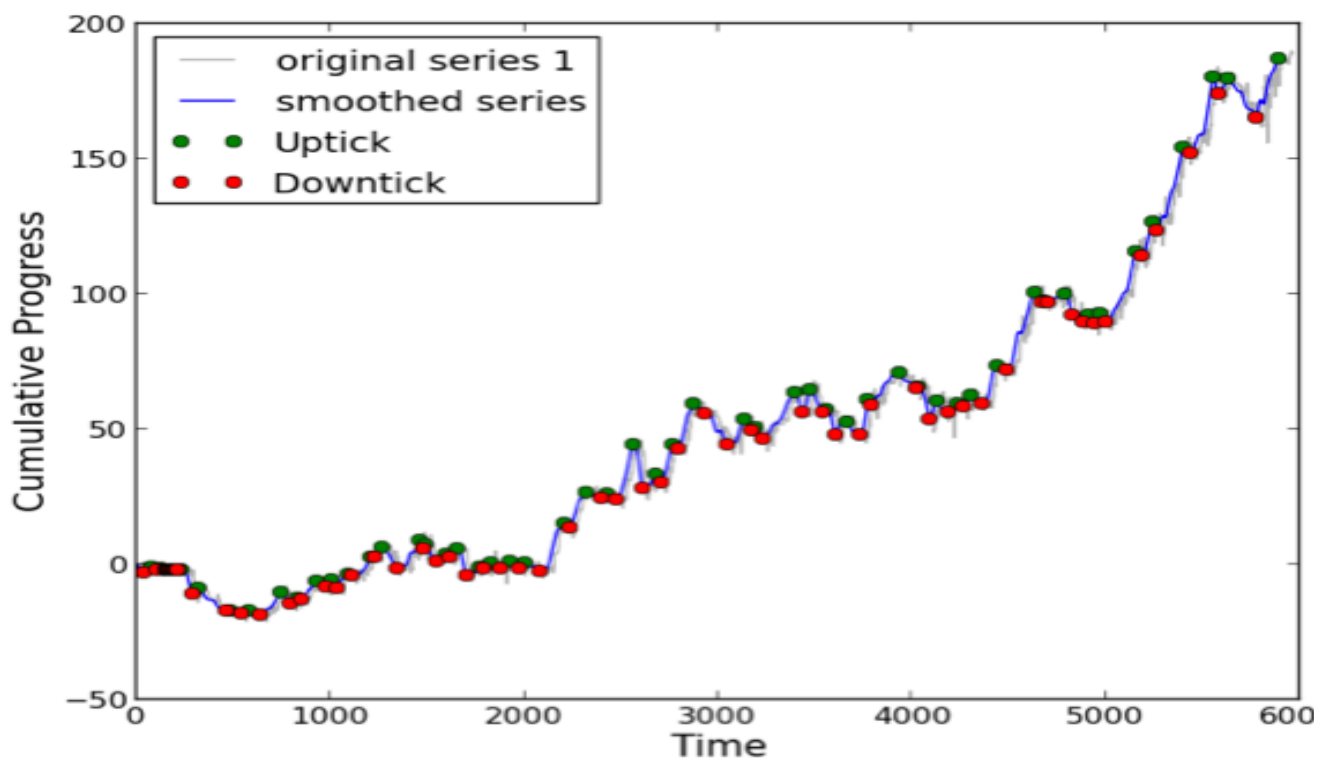
My time on this assignment is coming to a close. After many years, it is you who must pick up the flag and carry our cause forward. Some of you must act now ^{together} so the Duck vision does not falter. I have left several ghosts - Bob C projects in progress, but be like invisible spirits, at first, if you must. Others of you may play a smaller role, only completing a ^{two - George} few projects. Some of you may bring a more ^{ARTISTIC FLARE} animalistic quality to our work, but never stray too far from the original intent. But remember the correct path is not always black or white. I may return briefly, from time to time, but ultimately the future of this endeavor is in your hands.

^{PRESENT AND} (PK)

this assignment many years and carry our cause together now so the Duck left several ghosts - Bob C invisible of completing you not never more to be in stray But remember ways black After up the you I to fly like others ultimately your forward vision projects

may play ^{two - George} few projects Some ^{ARTISTIC FLARE} animalistic quality to work, but original intent. path is not

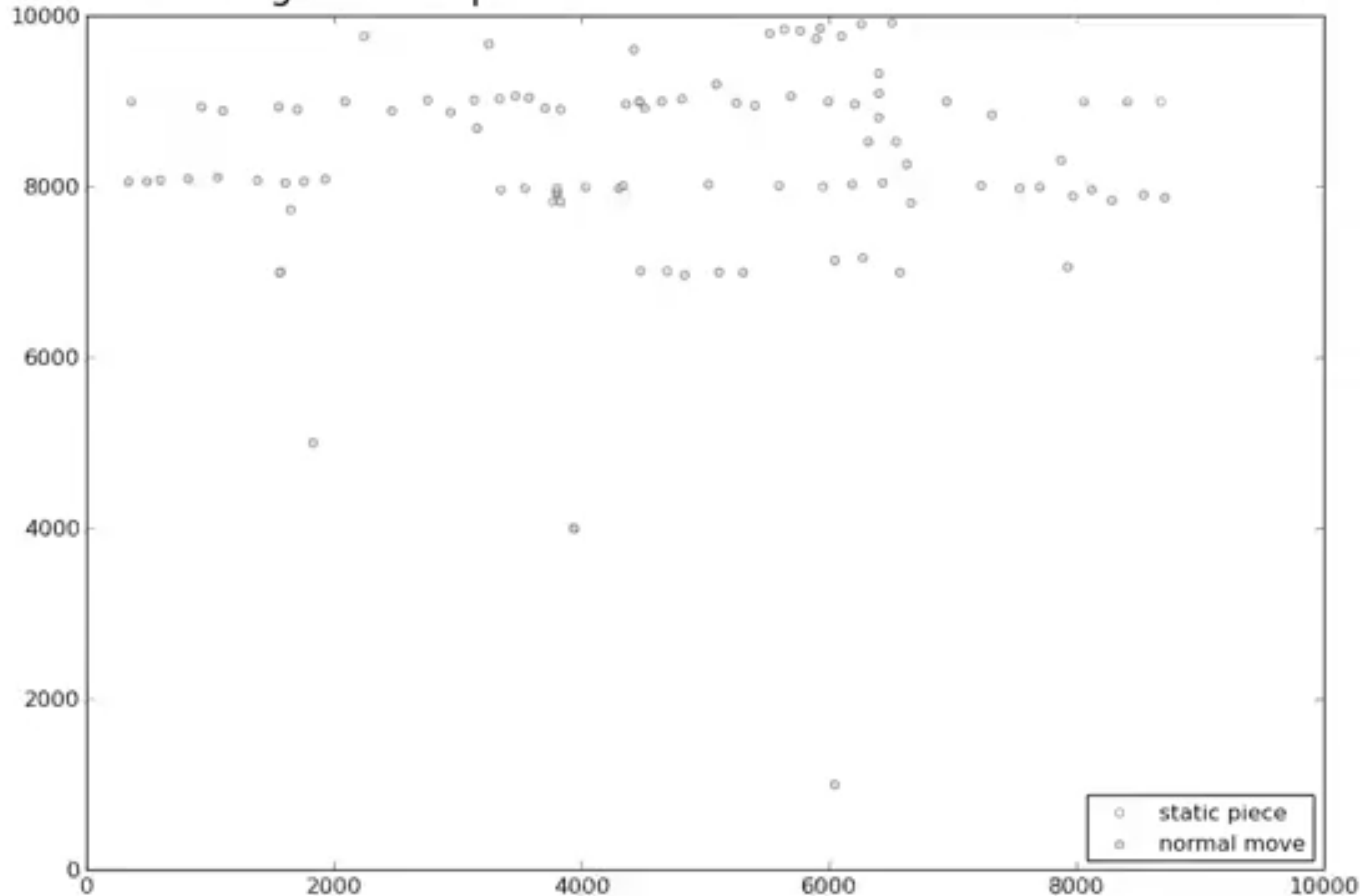
from time future of this endeavor ^{PRESENT AND} (PK) to be in stray But remember ways black After up the you I to fly like others ultimately your forward vision projects



Puzzle 2

Normal regime - 30 fps

Nov 17 00:08

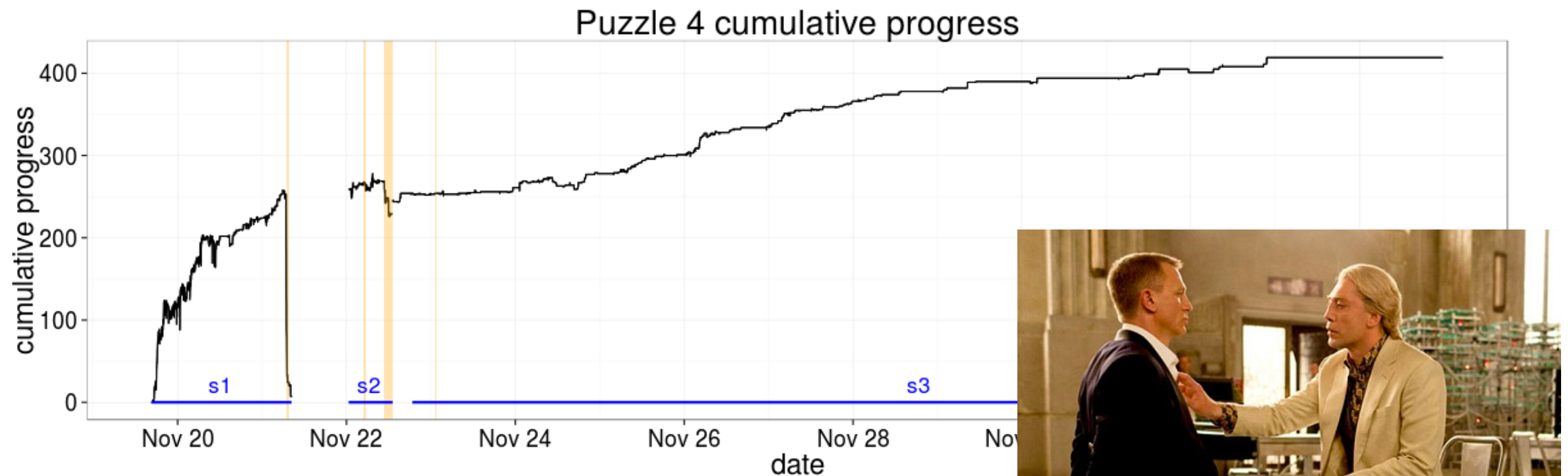


Shredder Challenge, UCSD Team

Crowdsourcing experiment

Playback of the moves on the virtual board

Puzzle 4



From: **ucsdsaboteur@hushmail.com**

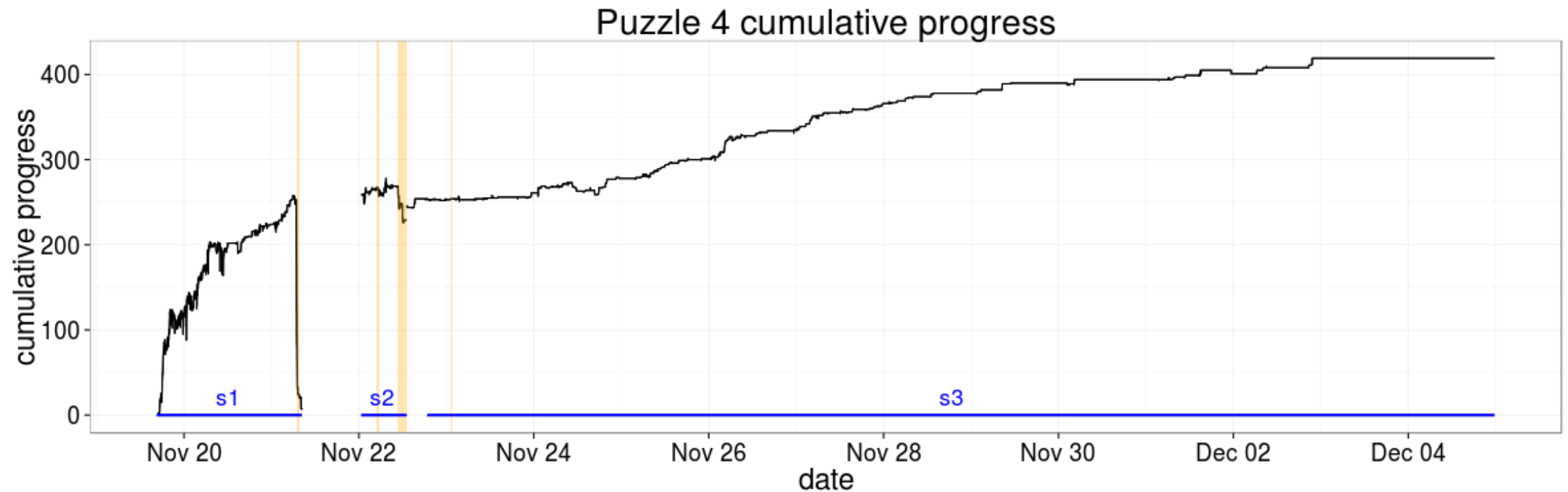
To: mcebrian@ucsd.edu

Date: Thu, Nov 24, 2011 at 4:20 AM

Subject: UCSD shredder challenge sabotage

I appreciate your acknowledging the cleverness of my exploitation of the weaknesses in your shredder challenge puzzle solving implementation. But do you really think they were that smart?

For **my first attack**, [...] moving all the pieces into a single pile. [...] However, it seems all you did was lock the pieces together and ban my IP address.



Which led me to my **second attack**, using a VPN and a neighbors wireless for some new IP addresses

$$[\dots]$$

select all the pieces and place them on top of each other, but this got old soon.

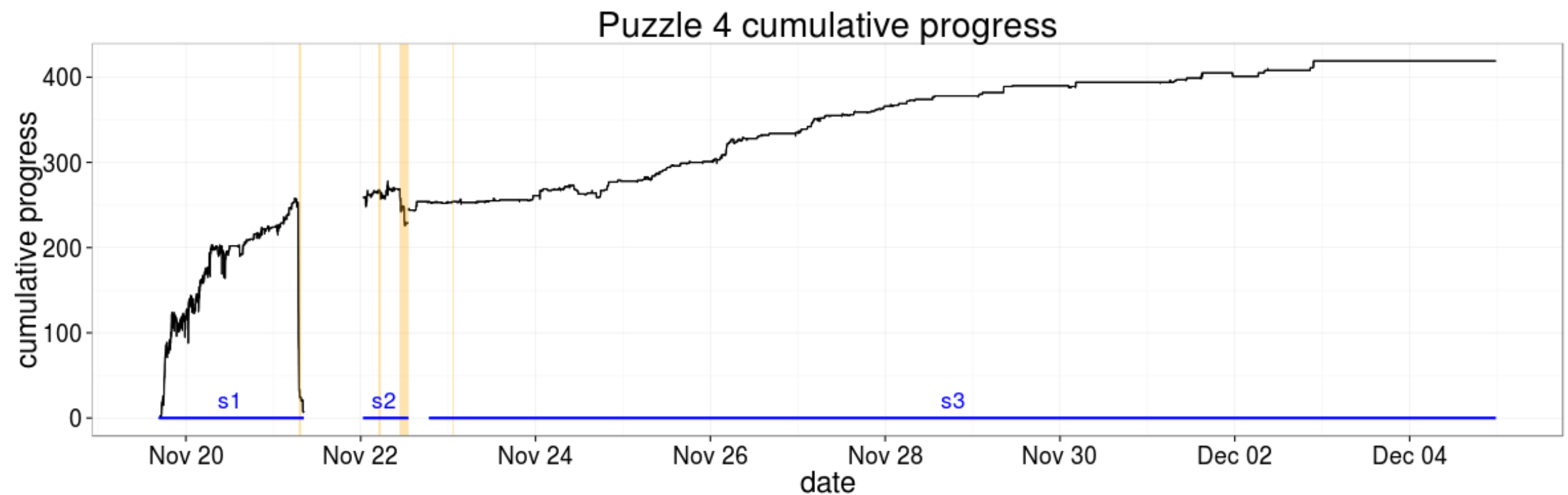
So I decided to get a bit more sneaky **[for my third attack]**

$$[\dots]$$

I selected a number of pieces, enough to make solving the puzzle difficult and not so much that people would immediately notice,

$$[\dots]$$

moved them off the top of the virtual table.



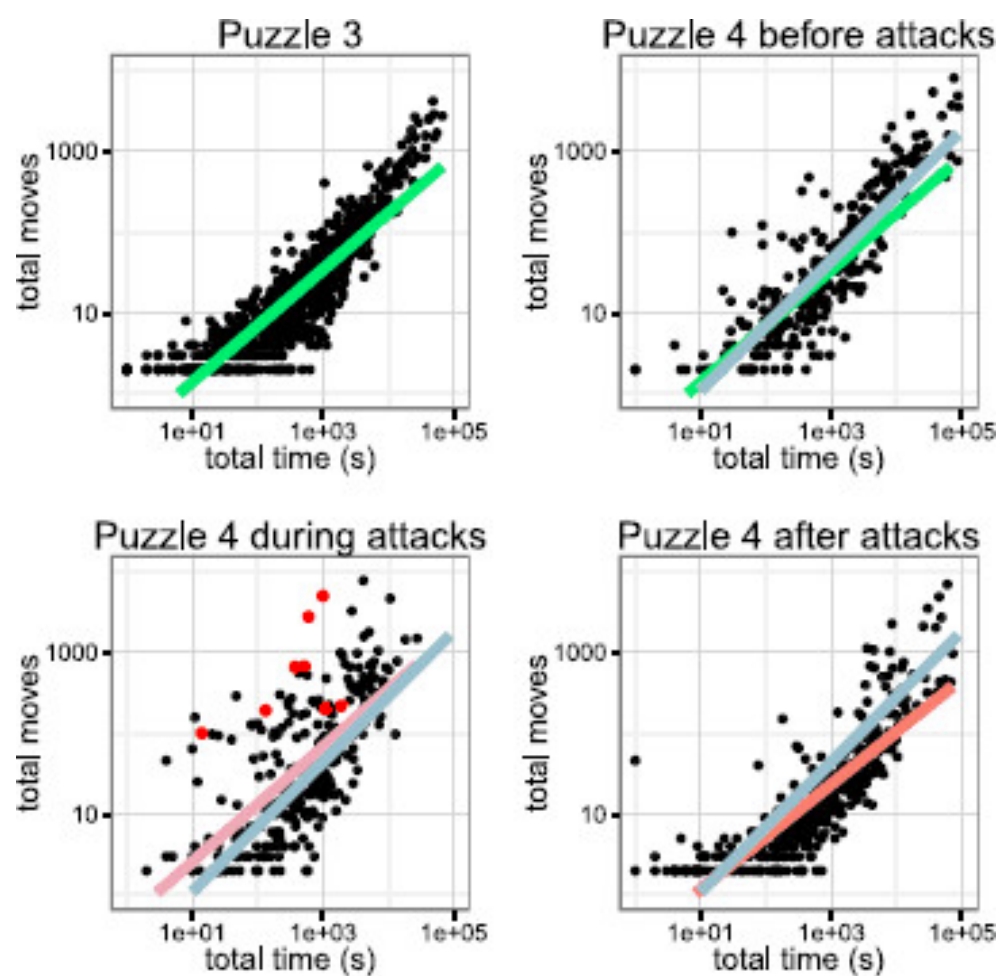
“Where else would one go but 4chan to recruit other people willing to engage in general internet mischief? [for my fourth attack]”

I too am working on the puzzle and personally feel that crowd sourcing is basically cheating

Crowd sourcing really just seems like a brute force and ugly plan of attack, even if it is effective

With all that said, **good luck to you, and may all your shreds belong to us.**

Leaderboard Summary		
Final		
Place	Display Name	Score
1	All Your Shreds Are Belong To U.S.	50
2	Schroddon	30
3	wasabi	26
4	MKI	22
5	mmvd	22
6	University of California, San Diego	22
7	Craig Landrum	19
8	mkelly	19
9	Icandoit	19
10	Goldsong	17



BACKCHANNEL

How A Lone Hacker Shredded the Myth of Crowdsourcing

High-tech analysis of a 2011 DARPA Challenge shows why we can't have nice things

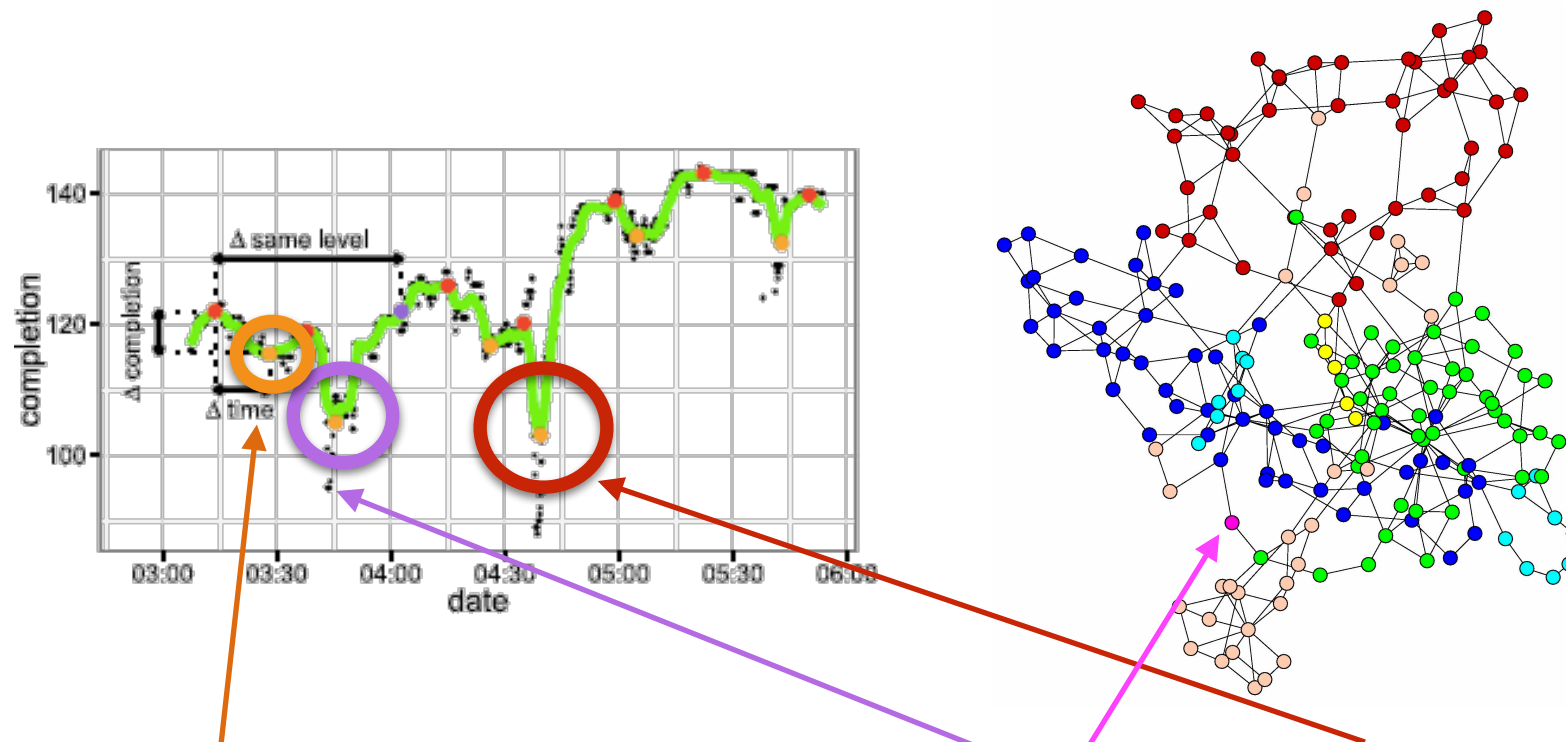


Mark Harris

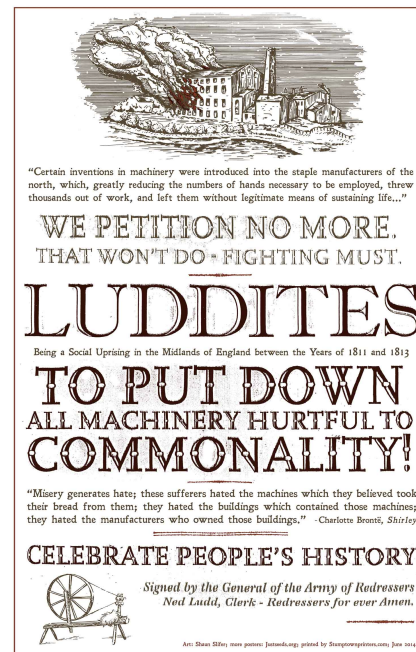
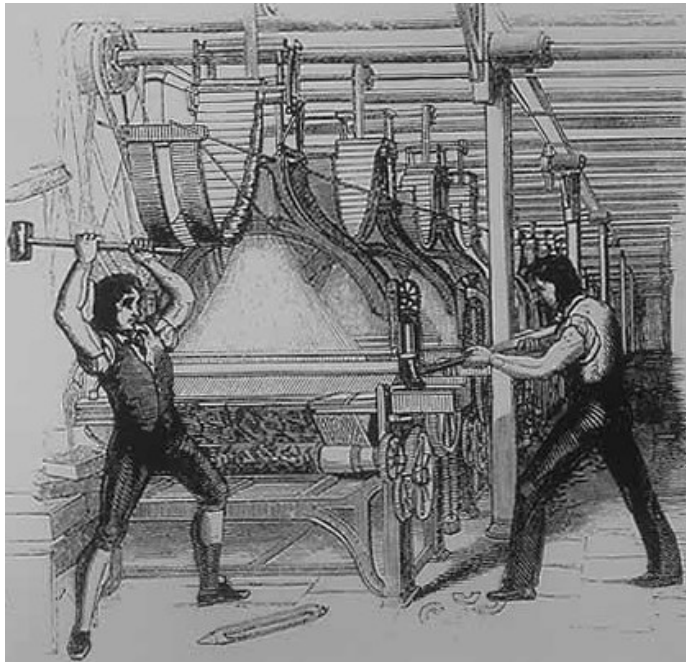
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Mostly British, mostly tech journalist reporting on the US from mostly rainy Seattle

Feb 9, 2015 · 16 min read



- We found a peak in recruitment that corresponds almost exactly to when the attacker claims he made an announcement on 4chan.
- Once we had eliminated the 4chan wave, could identify the **core attackers**.
- The initial assault was a sluggish affair, about ten times slower than subsequent hacks as though the saboteur was still feeling out the system's weaknesses.
- **Yet the attacker had left one more clue, a blunder that pointed right back to his door.**
- **During the first attack, he had logged in with an email address from his very own domain.**



“It’s only a matter of time, however **for what** should be a programming challenge about **computer vision algorithms**, **crowd sourcing** really just seems like a brute force and ugly plan of attack, even if it is effective.”

ANTI-LUDDITES, PRO-MACHINES?



Manuel Cebrian <manuelcebrianramos@gmail.com>

Sabotage

ucsdsaboteur@hushmail.me
<ucsdsaboteur@hushmail.me>
To: mcebrian@eng.ucsd.edu

Mon, Apr 9, 2012 at 11:06
PM

So I just discovered this article

<http://calit2.net/newsroom/article.php?id=1938>

and a few others. I no longer have access to the account I sent the previous email from as the time limit has expired on it. So my apologies if you responded to my previous correspondence. I believe the only part of the previous email I can recall that doesn't seem to have been published somewhere is my asking you if you really thought the sabotage was that smart...

If you still suspect them, the winning team had nothing to do with the sabotage. My sign off was really just intended to lead you astray. Which seems to have worked. If you have contact information for Otavio Good, let him know I apologize for that part of the email as they did work hard and win fairly. I am in no way associated with Anonymous either. Where else would one go but 4chan to recruit other people willing to engage in general internet mischief?

A "new field of network science" and "the most important piece of the scientific knowledge gained from this challenge," eh? Cool. I never imagined it would be seen in that light. Good work on the reputation system by the way. If you have any questions for me, I don't mind answering.