

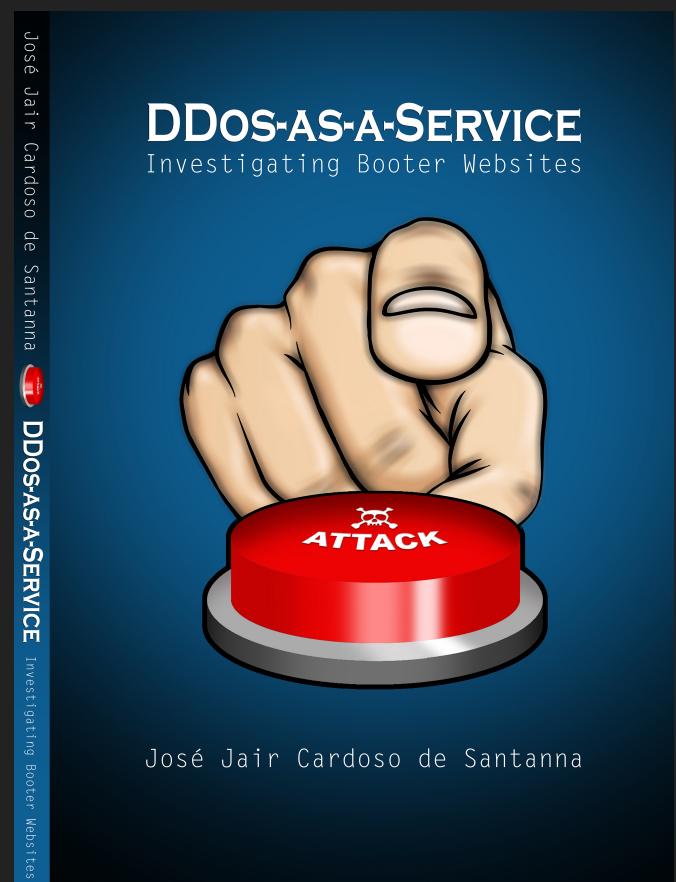
EFFECTIVE PRESENTATION SKILLS

Jair Santanna

J.J.SANTANNA@UTWENTE.NL

**WHO AM I?
WHY AM I HERE?**

DR. JOSÉ JAIR CARDOSO DE SANTANNA



Nov/2017

Principal Researcher (Northwave)
Assistant professor (UTwente)
Consultant to Law Enforcement (...)
Technical Advisor (Europol EC3)



Best Science Communicator
of the Netherlands

GOALS

- ▶ Learn how to structure presentations:
 - ▶ starting from the why;
 - ▶ summarising the what;
 - ▶ detailing the how.
- ▶ Learn how to emphasize different parts of your presentation depending on the audience and the presentation goal.

EFFECTIVE PRESENTATION SKILLS

A check-list



list elements of Effective Presentation Skills

Effective presentation skills involve several key elements that help engage the audience and communicate ideas clearly. Here are the essential elements:

1. Preparation

- Understand your audience
- Research your topic thoroughly
- Organize content logically (Introduction, Body, Conclusion)
- Create a structured outline

2. Clear Communication

- Use simple and concise language
- Avoid jargon unless necessary
- Define key terms and concepts

3. Confident Delivery

- Maintain eye contact
- Use appropriate gestures and body language
- Speak with a clear and steady voice
- Manage your pace (not too fast or slow)

4. Engaging Visuals

- Use slides, images, and videos effectively



Message ChatGPT



1. Preparation

2. Clear Communication

3. Confident Delivery

4. Engaging Visuals

5. Audience Engagement

6. Effective Use of Technology

7. Handling Questions and Challenges

8. Time Management

9. Strong Conclusion

10. Practice and Continuous Improvement

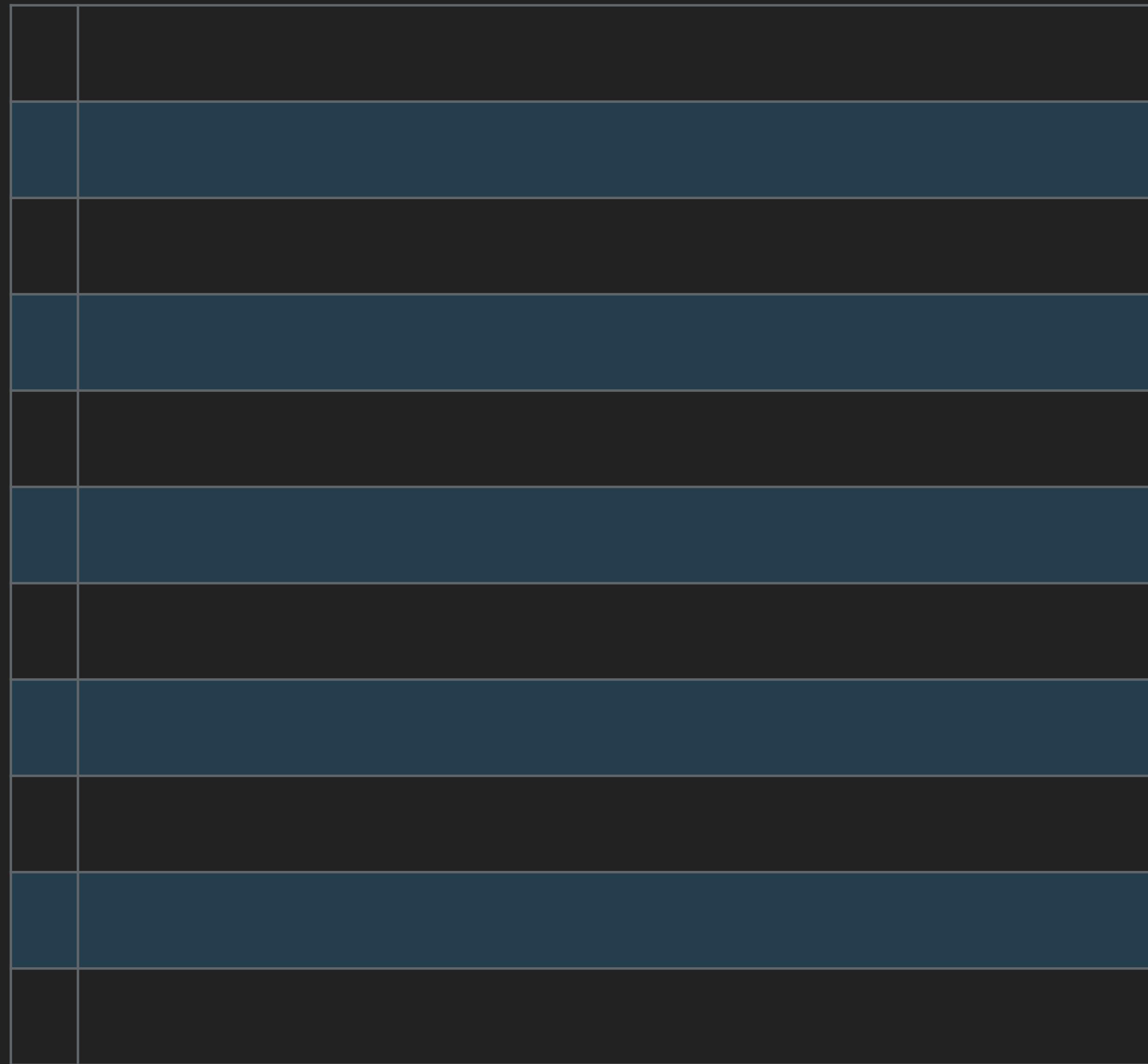
NERVOUS?



IF YOU ARRIVED AT THE MOMENT OF YOUR PRESENTATION . . .



**REMEMBER
YOU ALREADY SUCCEED!**



REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!



SO WHAT...

What is the goal of your presentation?

WHAT IS/SHOULD BE YOUR FOCUS WHILE PRESENTING A PAPER?

1. Boost your grade
2. Present what you did (process/results)
3. Show-off to your parents and/or friends
4. Make the audience understand
5. Just get your diploma

*Everything? Supervisor
Most of it? Colleague
Something? Family*



Focus? on the audience (family, colleagues, and supervisors levels)

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

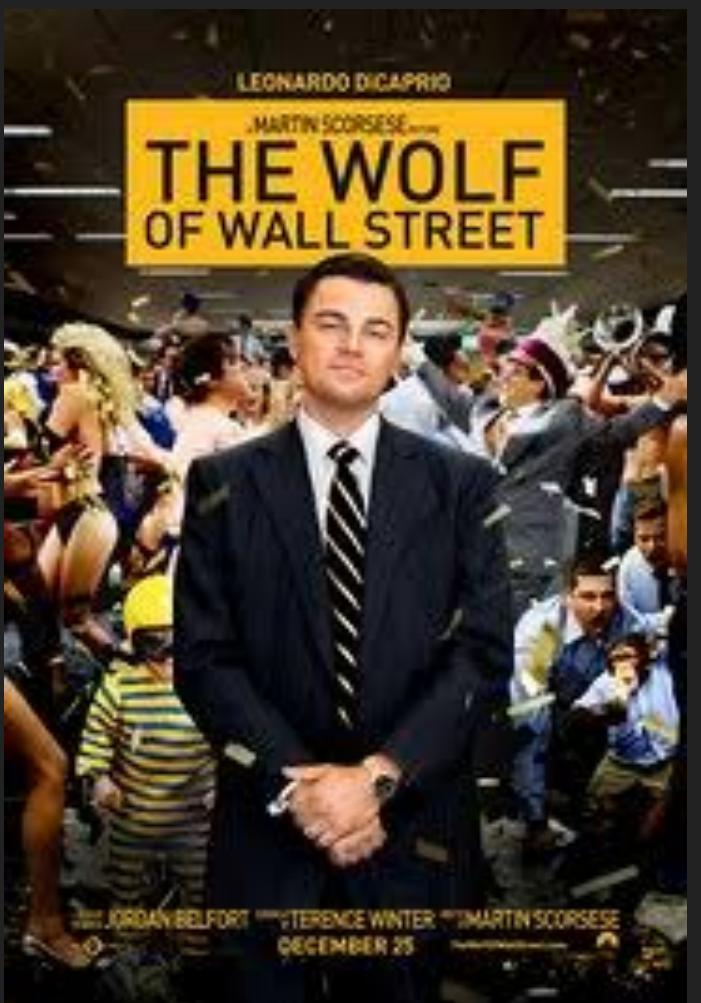
**CREATE A STORY THAT CONNECTS
WITH THE AUDIENCE,
USE SOMETHING THEY UNDERSTAND.**

FROM WHERE TO START?

**FROM "THE END":
THE GOAL!**



1. Why would you NEED a pen? [usage]
2. How are the others pens in the market?
3. Why THIS pen?



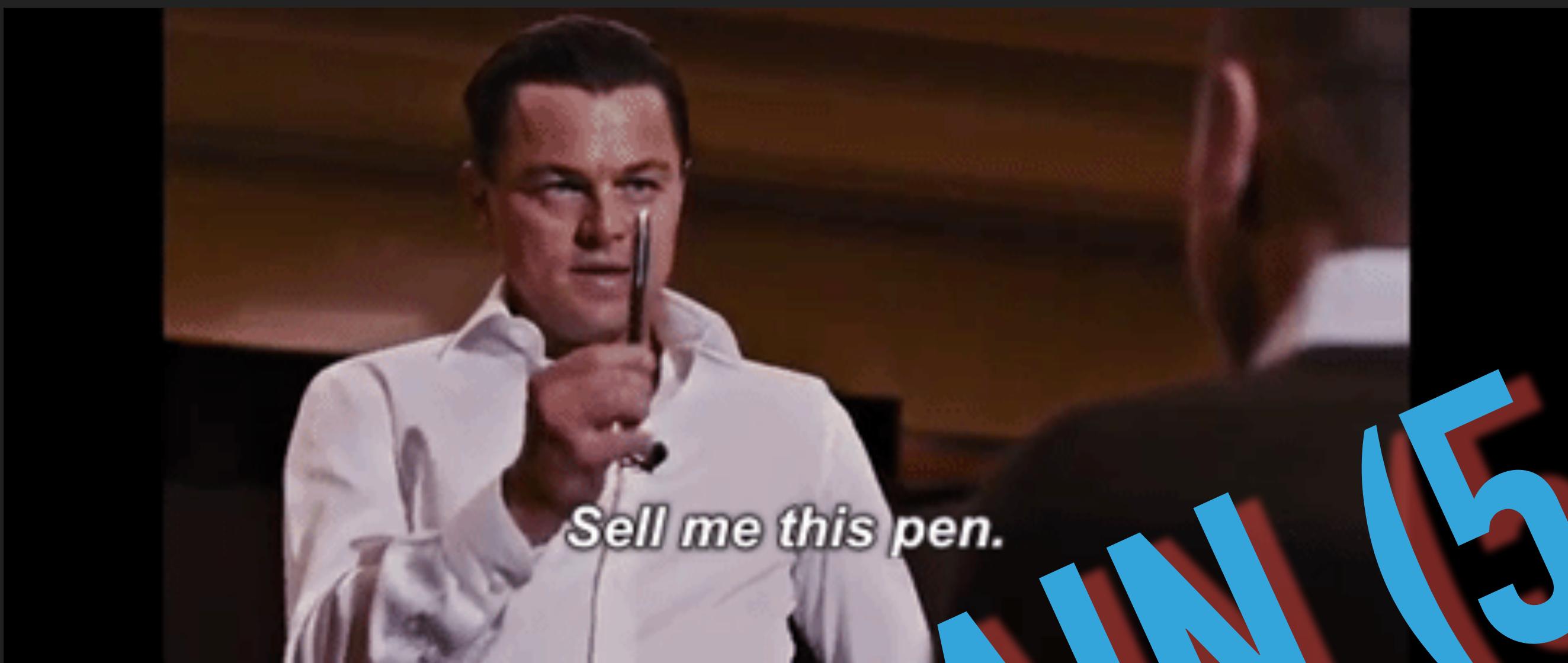
*Based on the true story of Jordan Belfort



*[10 secs to 2 mins]
1 min Pitch

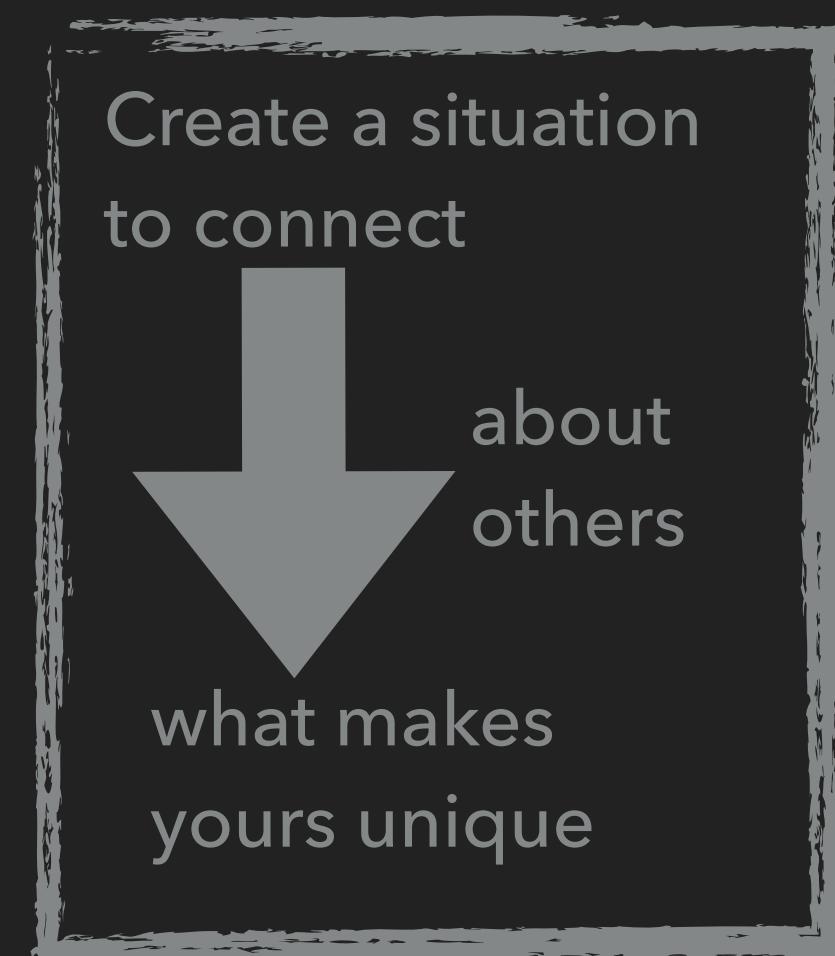
HOW TO IMPROVE YOUR STORY?

(FIRST) WRITE YOUR STORY IN A PIECE OF PAPER
[BEFORE CREATING YOUR SLIDES]



LET'S DO IT AGAIN (5 MIN)

1. Why would you NEED a pen? [usage]
2. How are the others pens in the market?
3. Why THIS pen?



*[10 secs to 2 mins]
1 min Pitch

	<p>Focus? on the audience (family, colleagues, and supervisors levels)</p>
	<p>Start? with the main goal</p>
	<p>After start? Connect with your audience (talk about something they know, they experience)</p>
	<p>Before anything? write your story in a piece of paper</p>

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

HOW TO STRUCTURE MY STORY?

1. START FROM THE PROBLEM/GOAL

2. STEP-BY-STEP TO MEET YOUR GOAL

3. DIVE INTO DETAILS (AUDIENCE-FOCUSSED)

4. REINFORCE YOUR STORY

5. END WITH YOU GOAL

TIP: ACADEMIC WORKS FOLLOW A PROCESS

	<p>Focus? on the audience (family, colleagues, and supervisors levels)</p>
	<p>Start? with the main goal</p>
	<p>After start? Connect with your audience (talk about something they know, they experience)</p>
	<p>Before anything? write your story in a piece of paper</p>
	<p>Structure? Goal => step-by-step => details =>reinforce => Goal</p>

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

HOW MANY SLIDES SHOULD I USE?

"~2 min per slide"

#Slides = (Total_time/2) + (#(re)enforcement_slides)

Slide 1: title, name

Slide 2: PROBLEM/GOAL

Reinforce

Reinforce

Slide N: Goal

	<p>Focus? on the audience (family, colleagues, and supervisors levels)</p>
	<p>Start? with the main goal</p>
	<p>After start? Connect with your audience (talk about something they know, they experience)</p>
	<p>Before anything? write your story in a piece of paper</p>
	<p>Structure? Goal => step-by-step => details =>reinforce => Goal</p>
	<p>Slides amount? "~2 min per slide"</p>

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

HOW TO PRESENT FIGURES, TABLES, AND GRAPHS?

A PRESENTATION OF A PAPER IS NOT COPY-PASTING

1. OVERALL DESCRIPTION (FOR TABLES AND GRAPHS) OR FOLLOW THE FLOW (FOR “BUILDING BLOCKS” FIGURES)
2. HIGHLIGHT THE MOST IMPORTANT INFO (MAX 3)
3. [ANIMATE!!!]
3. GOOD QUALITY (VECTORISED, NO PRINT SCREEN)
4. RESPECT COLOUR LOGIC

EXAMPLE 1

Table: Statistics of attacks

Attack	Type of Attack	Avg. Attack Power [Gbps]	# machines
1	DNS-based	0.7	4486
2	DNS-based	0.25	78
3	DNS-based	0.33	54
4	DNS-based	1.19	2970
5	DNS-based	0.006	8281
6	DNS-based	0.15	7370
7	DNS-based	0.001	1

The screenshot shows a web browser displaying the Open Resolver Project website. The page features a table of attack statistics and a large red circle in the bottom right corner containing the text "9427X".

Table: Statistics of attacks

Attack	Type of Attack	Avg. Attack Power [Gbps]	# machines
1	DNS-based	0.7	4486
2	DNS-based	0.25	78
3	DNS-based	0.33	54
4	DNS-based	1.19	2970
5	DNS-based	0.006	8281
6	DNS-based	0.15	7370
7	DNS-based	0.001	1

Open Resolver Project

Open Resolvers pose a significant threat to the global network infrastructure by answering recursive queries for hosts outside of its domain. They are utilized in DNS Amplification attacks and pose a similar threat as those from [Smurf attacks](#) commonly seen in the late 1990s.

We have collected a list of 32 million resolvers that respond to queries in some fashion. 28 million of these pose a significant threat (as of 27-OCT-2013).

[Detailed History and Breakdown](#)

[Check my IP space](#)

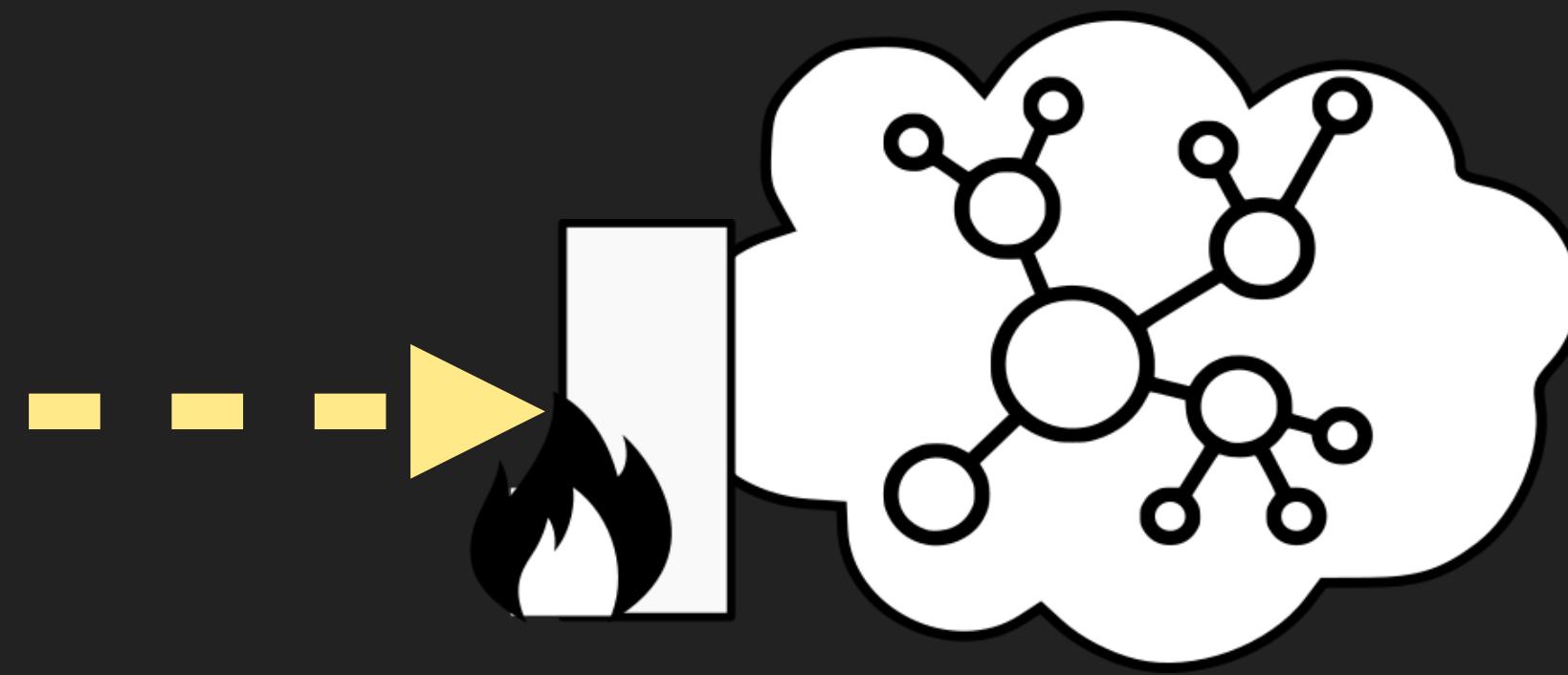
Search my IP space (eg: 192.0.2.0/24 - searches "larger" than /22 will be rejected)

[...4-heatmap of 20130519 data heatmap archive](#)

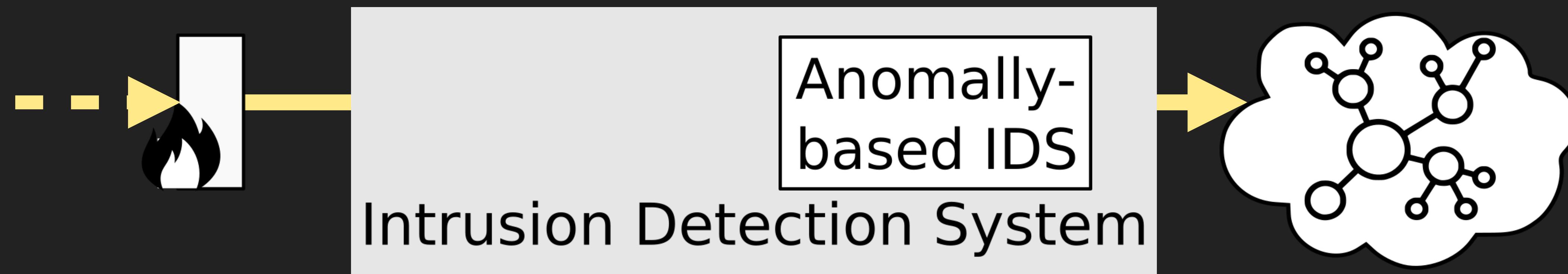
If you are in the security business, you need access to raw data.

9427X

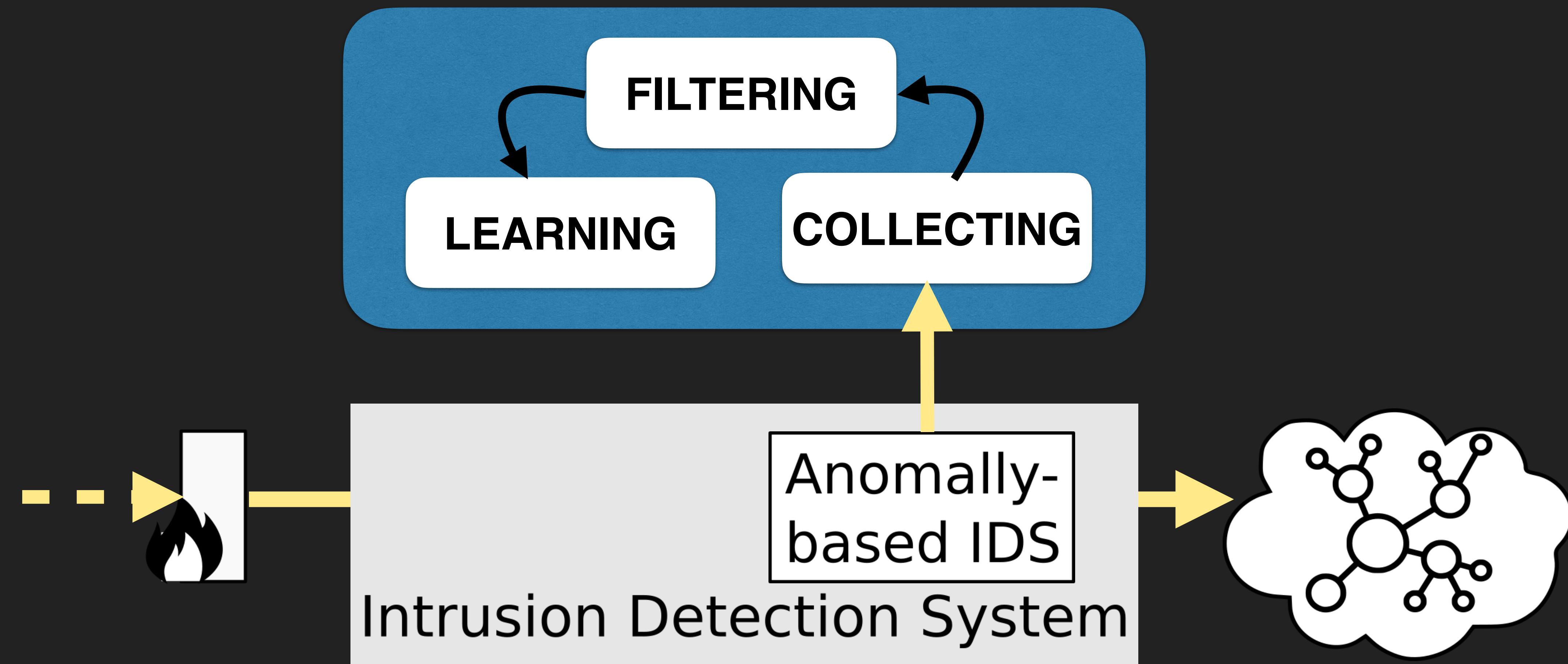
EXAMPLE 2



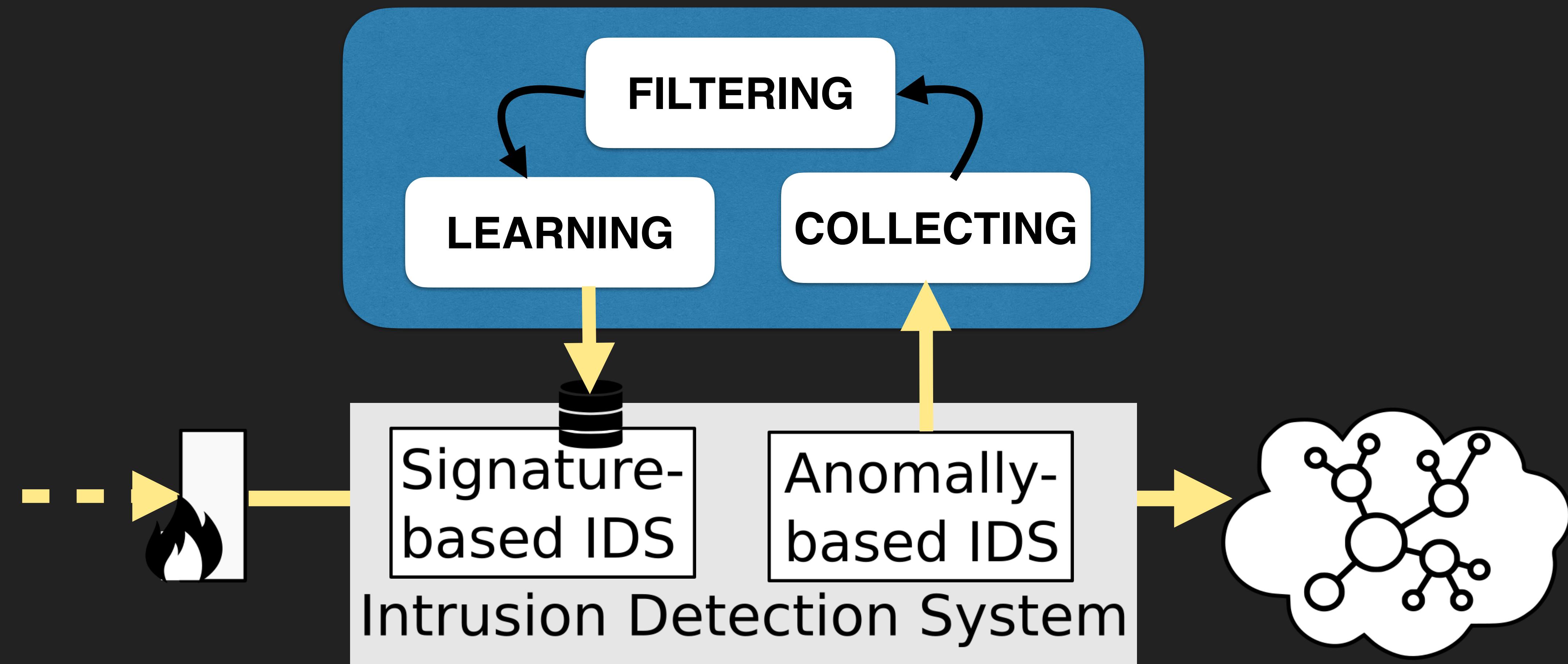
EXAMPLE 2



EXAMPLE 2

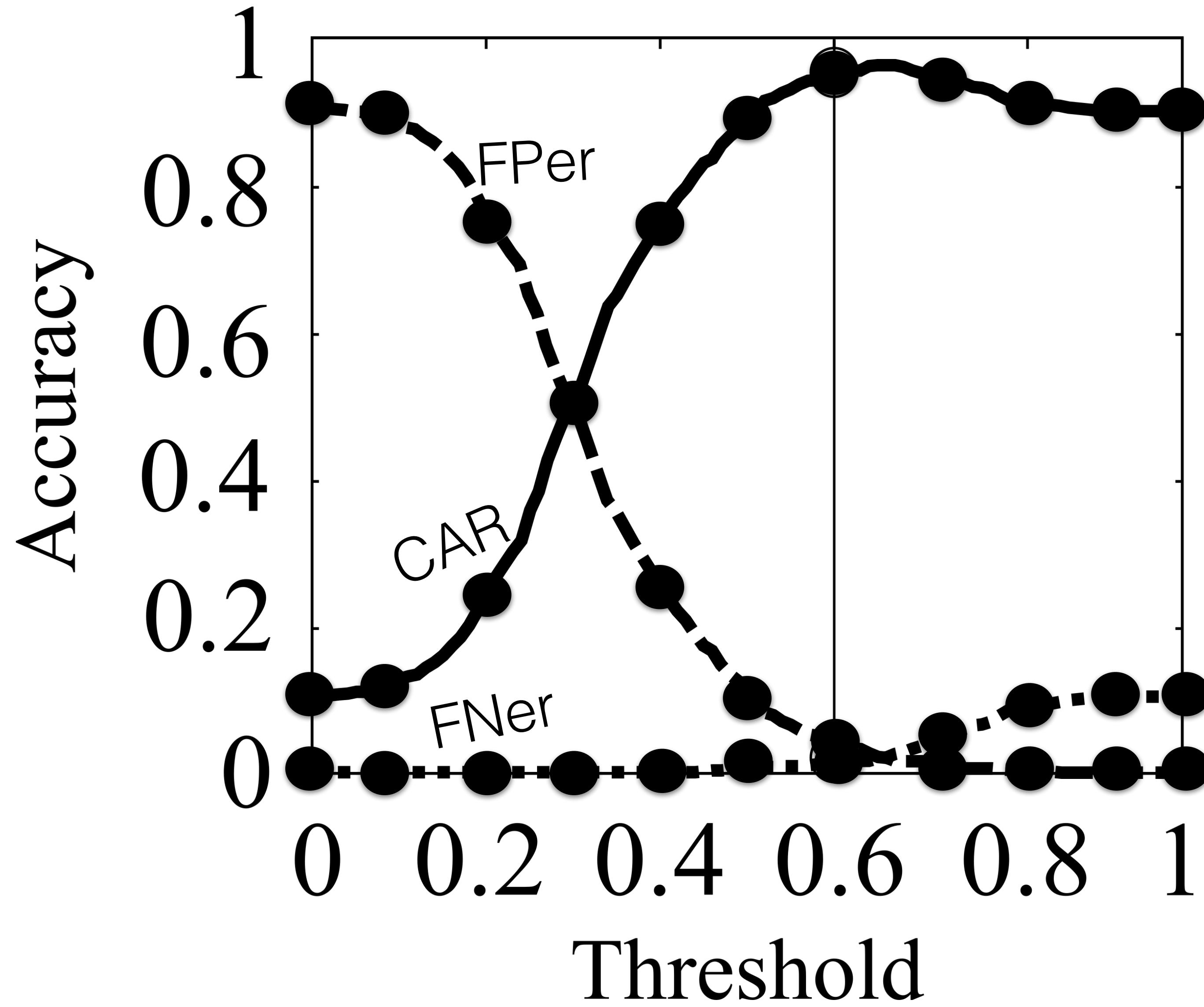


EXAMPLE 2



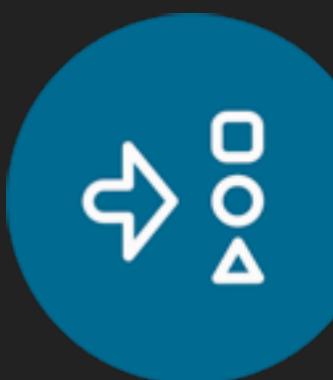
EXAMPLE 3

*Vary Threshold in 0,1



*465 suspect URLs (140 Booters and 325 other websites)

EXAMPLE 4



CLASSIFIER

- Euclidean distance
- Squared Euclidean distance
- Manhattan distance
- Fractional distance
- Cosine distance
- k-Nearest Neighbors (k-NN)
- Naive Bayes
- Machine Learn

in: $\vec{v}, \vec{p}, \vec{w}, CAR, FP_{er}, FN_{er}$
in: $max_interactions, \mu, \sigma$
out: $\vec{w}', CAR', FP'_{er}, FN'_{er}$

```
1: procedure WEIGHADAPT2ABETTERCAR(input,output)
2:   while ( $i < max\_interactions$ )||(CAR = 1) do
3:     for  $i = 0$  to  $len(\vec{w})$  do
4:        $\vec{w}'[i] \leftarrow \vec{w}[i] * rand\_gauss(\mu; \sigma)$ 
5:     end for
6:     CAR', FP'_{er}, FN'_{er}  $\leftarrow cosine\_dist(\vec{v}, \vec{p}, \vec{w}')$ 
7:     if CAR' > CAR then
8:       CAR  $\leftarrow CAR'$ 
9:     end if
10:    end while
11:  end procedure
```

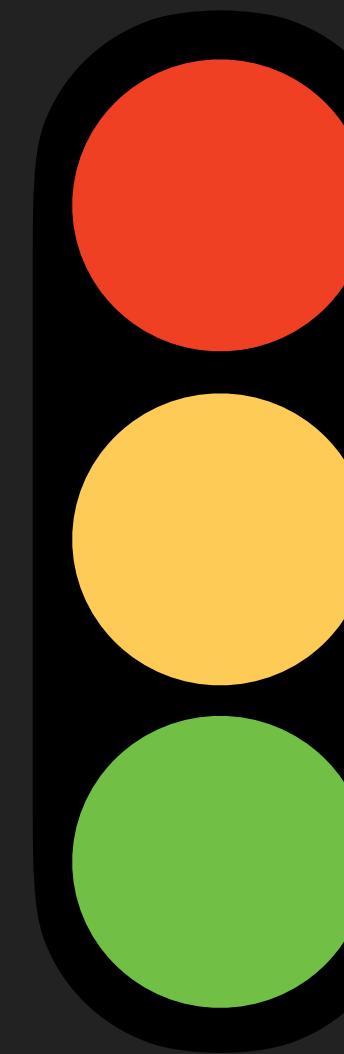


	CAR	FPer	FNer
Euclidean distance	94,40%	2,20%	3,40%
Cosine distance	95,50%	1,50%	3,00%

824 iterations

$w' = [1, 0.4, 0.3, 0.47, 0.21, 0.32, 0.17, 0.19, 0.16, 0.18, 0.13, 0.1, 0.04, 0.04, 0.03]$

WHAT IS THE LOGICAL MEANING OF THESE COLOURS?



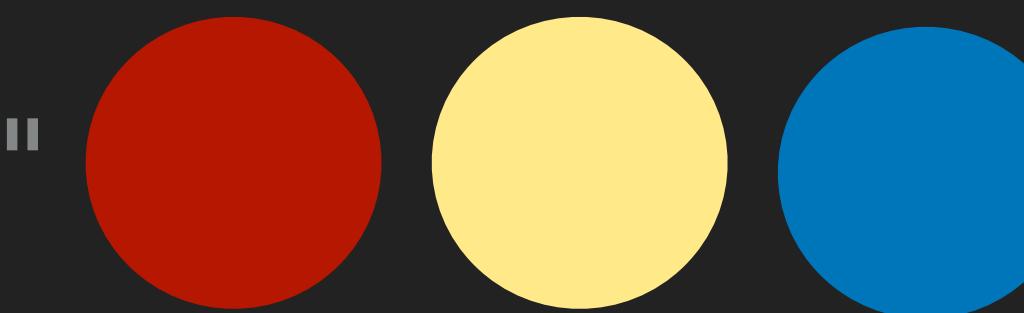
Stop, Bad, Important

Attention

Go, Good, Super nice, Awesome

CAN I CHANGE IT?

"Mine"



BE CONSISTENT AND LOGICAL!

	Focus? on the audience (family, colleagues, and supervisors levels)
	Start? with the main goal
	After start? Connect with your audience (talk about something they know, they experience)
	Before anything? write your story in a piece of paper
	Structure? Goal => step-by-step => details =>reinforce => Goal
	Slides amount? "~2 min per slide"
	Visual aids? overall or flow => good quality => highlight THE info (3 max) => animation => respect colours

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

HOW TO MAKE IT SIMPLER?

- 1. ASK YOURSELF WHAT CAN BE REMOVED?**
- 2. CHANGE TEXT FOR FIGURES (WHEN POSSIBLE)**
- 3. SHORTEN TEXT FOR KEY-WORDS**

	Focus? on the audience (family, colleagues, and supervisors levels)
	Start? with the main goal
	After start? Connect with your audience (talk about something they know, they experience)
	Before anything? write your story in a piece of paper
	Structure? Goal => step-by-step => details =>reinforce => Goal
	Slides amount? "~2 min per slide"
	Visual aids? overall or flow => good quality => highlight THE info (3 max) => animation => respect colours
	Keep simpler? removing "fat", changing text for figures and text for key-words

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

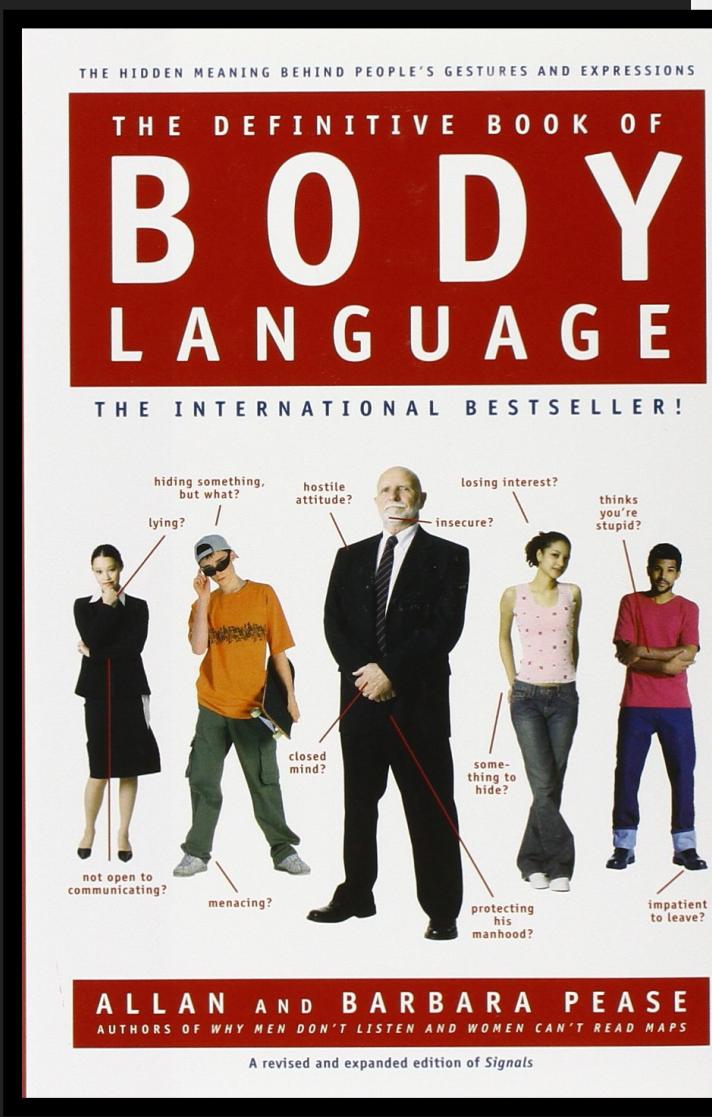
CREATE A (GROUP) PRESENTATION

3' MINUTES DURATION



WHAT IS THE BEST POSTURE WHILE PRESENTING A PAPER?

1. STAND UP STRAIGHT (BOTH FOOT ON THE GROUND)
2. FEET AT SHOULDER LENGTH
3. "OPEN" POSTURE
4. HANDS/ARMS? "PRAYING" OR AN INTENTIONAL GESTURE
5. MOVE NOT TOO MUCH, NOT TOO LITTLE
6. TRICKY LEFT VS. AUDIENCE LEFT



	Focus? on the audience (family, colleagues, and supervisors levels)
	Start? with the main goal
	After start? Connect with your audience (talk about something they know, they experience)
	Before anything? write your story in a piece of paper
	Structure? Goal => step-by-step => details =>reinforce => Goal
	Slides amount? "~2 min per slide"
	Visual aids? overall or flow => good quality => highlight THE info (3 max) => animation => respect colours
	Keep simpler? removing "fat", changing text for figures and text for key-words
	Posture? straight, feet at shoulder length, open, "praying" arms or gesturing, move, your left vs. audience left

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

HOW TO ANSWER QUESTION(S)?

- 1. THANK FOR THE QUESTION**
- 2. REPEAT/REPHRASE THE QUESTION**
- 3. ANSWER SHORT AND CLEAR**
- 4. CHECK WHETHER YOU SATISFIED**

	Focus? on the audience (family, colleagues, and supervisors levels)
	Start? with the main goal
	After start? Connect with your audience (talk about something they know, they experience)
	Before anything? write your story in a piece of paper
	Structure? Goal => step-by-step => details =>reinforce => Goal
	Slides amount? "~2 min per slide"
	Visual aids? overall or flow => good quality => highlight THE info (3 max) => animation => respect colours
	Keep simpler? removing "fat", changing text for figures and text for key-words
	Posture? straight, feet at shoulder length, open, "praying" arms or gesturing, move, your left vs. audience left
	Questions? Repeat => Answer => Check

REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

IS IT ALL ABOUT STYLE?

YES AND NO

A GOOD PRESENTATION IS AN EXTENSION OF
A GOOD RECIPE WITH YOUR TOUCH.

BE CREATIVE! HAVE FUN!

“HAVING FUN WITH THE PITCH WAS ABSOLUTELY CRITICAL. IF THE PRESENTATION ISN’T FUN FOR THE PERSON GIVING IT, THEN EVERYONE ELSE BECOMES ANXIOUS.”

—Oren Klaff, Pitch Anything, Chapter 7

One more thing...



REHEARSE

REFINE

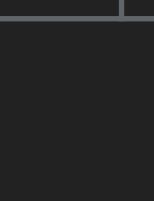
REHEARSE

REFINE

REHEARSE

...

Only then you will become good!

	Focus? on the audience (family, colleagues, and supervisors levels)
	Start (and End)? with the main goal
	After start? Connect with your audience (talk about something they know, they experience)
	Before anything? write your story in a piece of paper
	Structure? Goal => step-by-step => details =>reinforce => Goal
	Slides amount? "~2 min per slide"
	Visual aids? overall or flow => good quality => highlight THE info (3 max) => animation => respect colours
	Keep simpler? removing "fat", changing text for figures and text for key-words
	Posture? straight, feet at shoulder length, open, "praying" arms or gesturing, move, your left vs. audience left
	Questions? Repeat => Answer => Check
	Becoming good? Rehearse => Refine => Rehearse

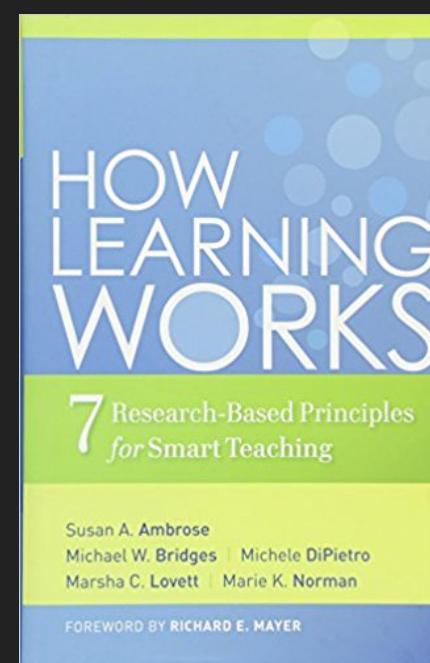
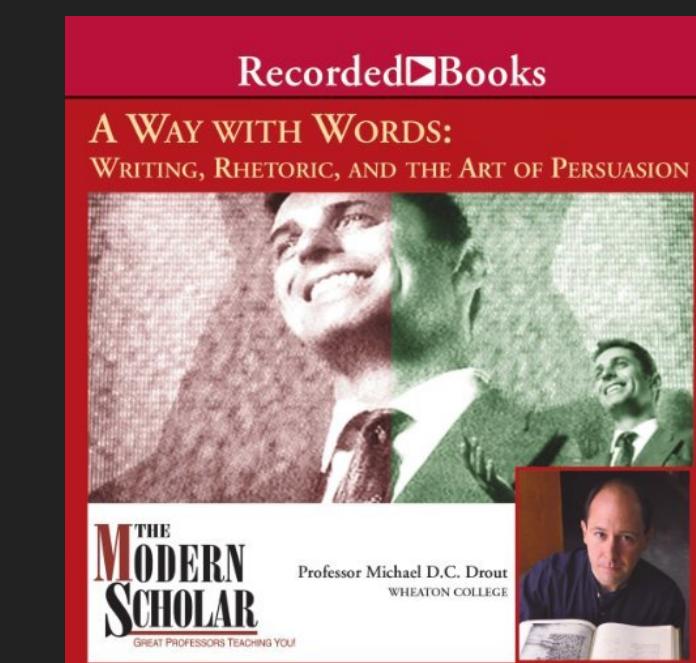
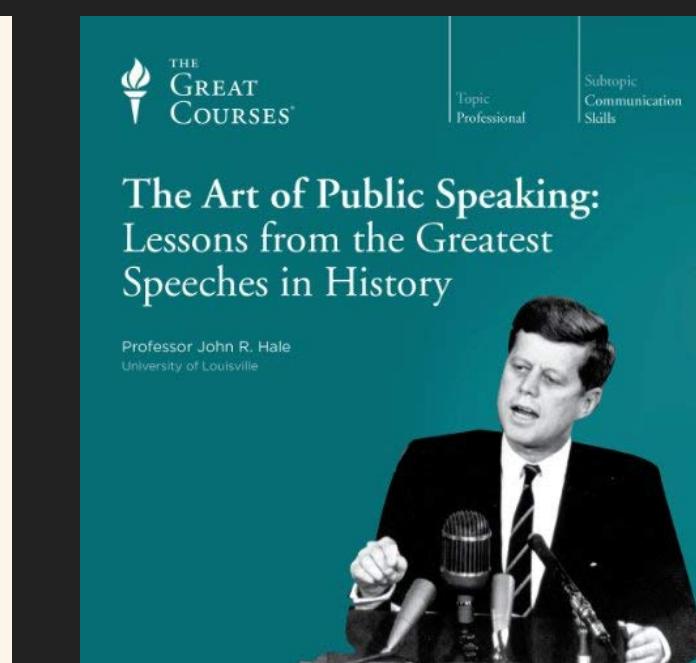
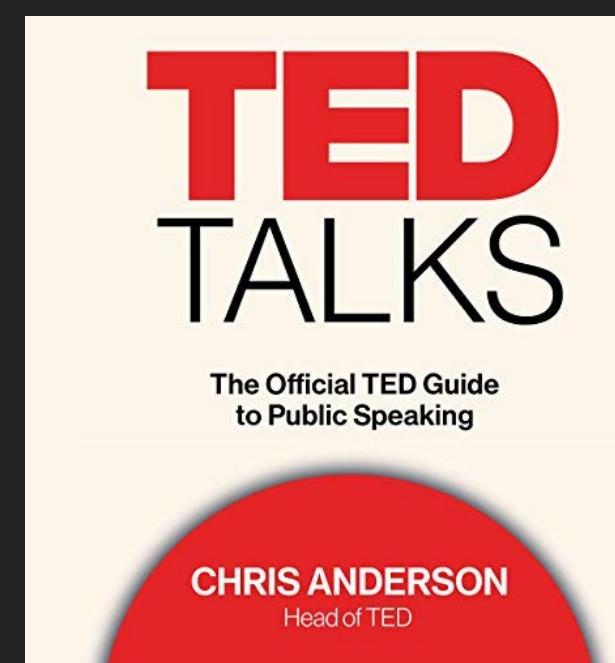
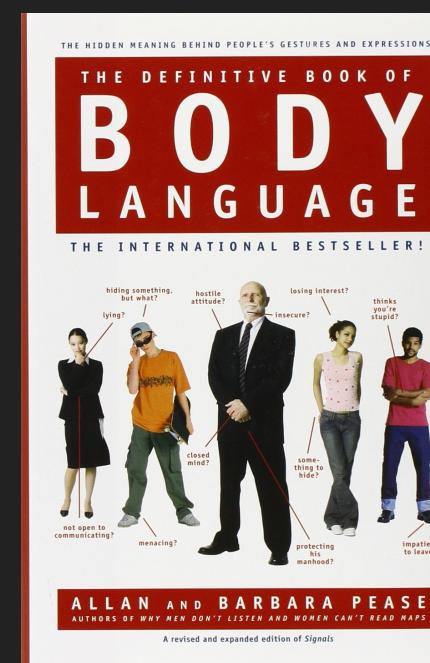
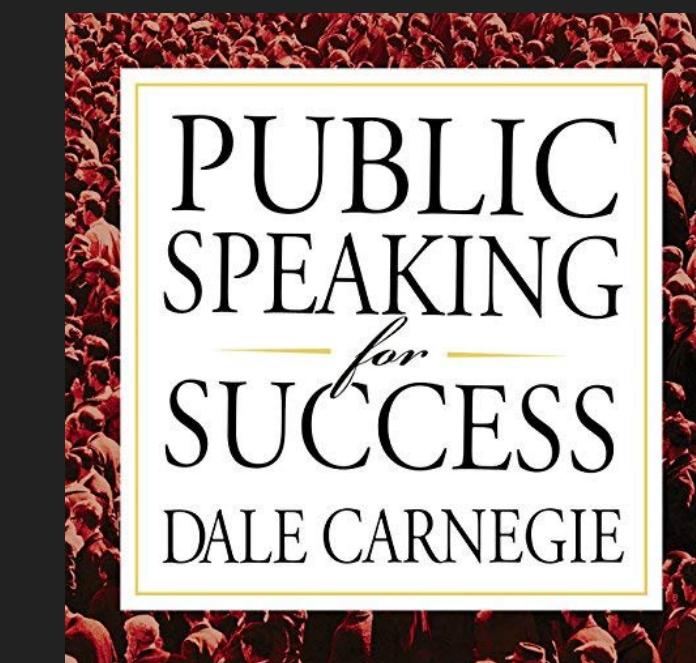
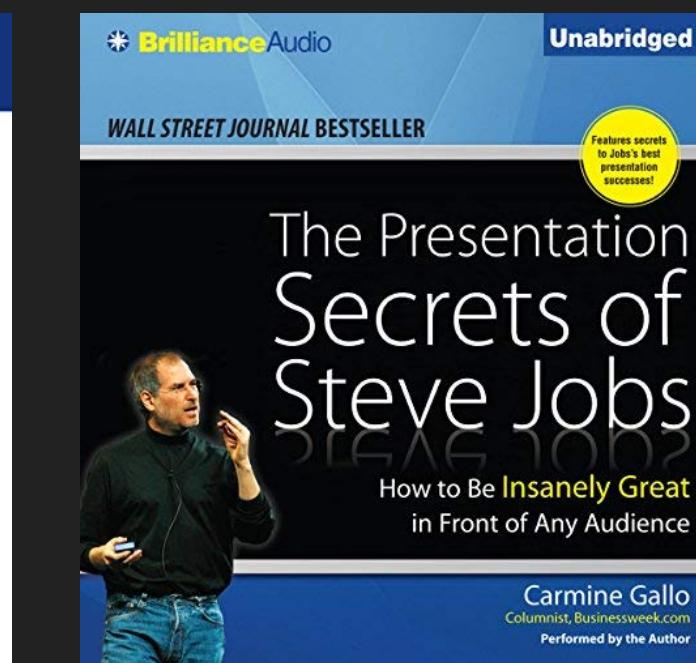
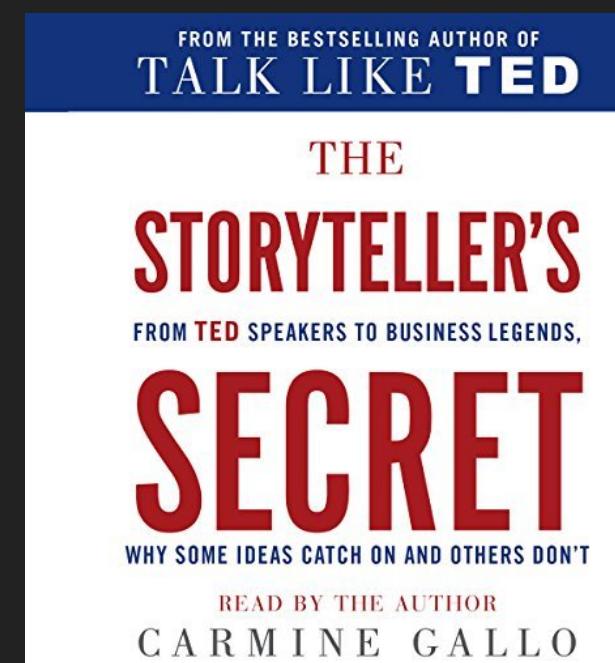
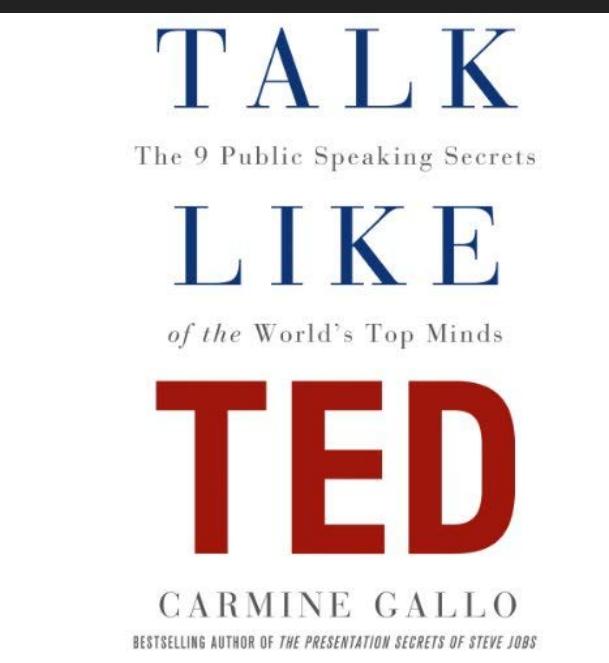
REMEMBER: YOU ALREADY SUCCEED! HAVE FUN!

EFFECTIVE PRESENTATION SKILLS

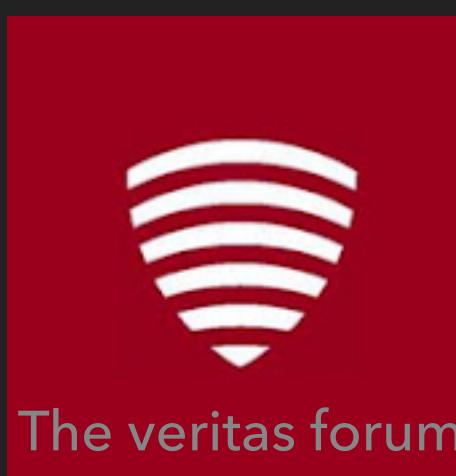
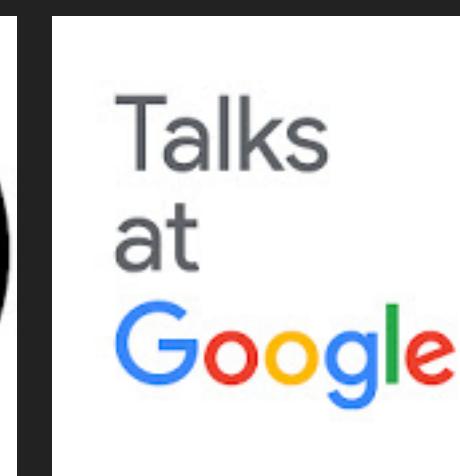
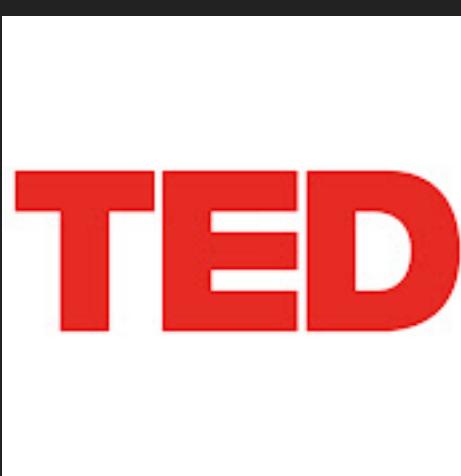
A check-list



REFERENCES AND RECOMMENDATIONS



YOUTUBE CHANNELS:





<http://bit.ly/2Dn7gCu>

My 6 min pitch summarising 4 years of PhD work

***My goal was to make my* grandfather to understand my work**



<https://www.youtube.com/watch?v=9av9ifNbMf8>

My 3 minutes pitch that made me win FameLab NL 2018

***My goal was to make any Dutch person to understand my work**