



**IMPETUS**



# IMPETUS Weapon Detection Tool

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gun





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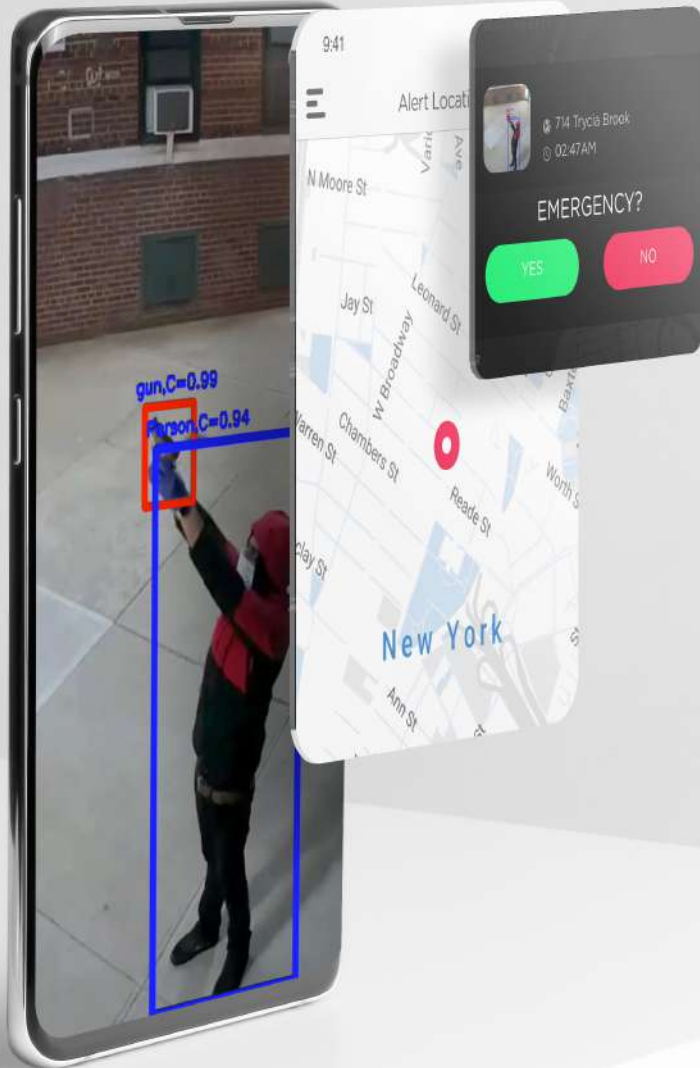
The **WEAPON DETECTION Tool's** Mission Is To Detect Weapons To Prevent **Loss Of Life.**



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The Weapon Detection Tool  
Provides Instant **SITUATIONAL AWARENESS.**



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But Even When Using The Latest Machine Learning And AI Algorithms, Detecting a Weapon With Security Cameras Is **Hard**, Because The Camera Angle And The Environment Is **Never The Same**.





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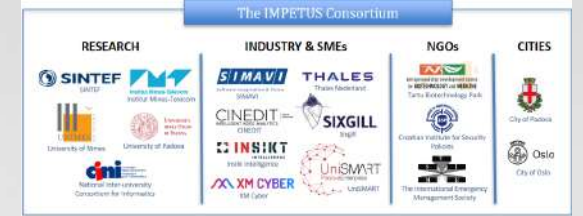
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Ultimately Undetected Weapons Lead To **Expensive** Site Closure And **Loss Of Life** Because The AI They Use Cannot Be Automatically Calibrated When The Camera Angle Changes.





As A Result Existing Weapon Detection Systems Constantly Produce **False Alerts** And **Never** Learn From It.





We Learn That To Detect Weapons  
The AI Needs To Be **Super Accurate.**

Therefore **Data Sharing** Is **Key** To Build Better AI's.



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## PROBLEM #1

Data Sharing Between **Smart Cities** and **High-Tech Companies** is **Very Limited** Due to GDPR Compliance.





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## PROBLEM #2

Due To **Drifting**, The AI Keeps Becoming **Unstable** And The Predictions Keep On Becoming **Erroneous**.



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## PROBLEM #2

See This **Simple** Linear Regression.

$$y = \alpha + \beta_1 * x_1 + \beta_2 * x_2 + \beta_3 * x_3 + \dots$$

We Simply Map The **Independent Variables**  $x_i$  To  
Predict The **Target Variable**  $y$  :



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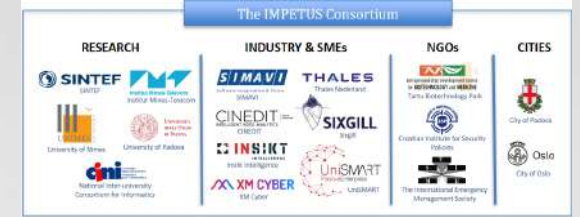




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## It's Called AI Drifting

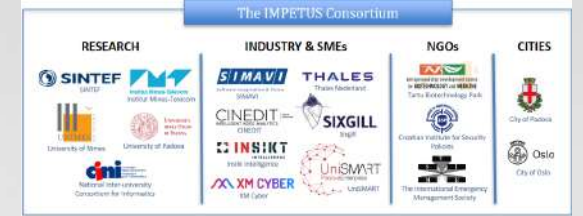
It Pretty Much Means That Any AI  
Needs To Be Retrained To Remain Accurate.



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# It's An Update

Just Like When You Update An App On Your Phone



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## This Update Prevents Drifting

It Keeps The Weapon Detection Tool **Accurate**  
But To Do This We Need The Smart Cities To **Share Data**



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**GDPR Regulations**  
Are Making It Extremely  
Challenging And Almost  
**Impossible** For Us To Make  
You **Safer** Because  
Smart Cities Are **Not**  
**Allowed To Share Data**  
To Prevent AI **Drifting**.



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When **Sharing Data** You Remain Safe And We **Prevent Terror Attacks.**







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When **Data** Is Not Shared The Same Event That Happened At The Bataclan, Can Happen To You!



90 Dead





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SO...

What Are You Going To Do **About It** ?



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**Thank you!**

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