

# Smart Surveillance System using Computer Vision

## #Team:

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Amit Sati      (Testing, Documentation)

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Deepankar  
Sharma      (Coding-Python, CV)

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Pawan  
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# # Proposal:

The basic idea is to make **Surveillance system** “smart” by applying the Computer Vision Techniques to automatically generate alerts in case of mishaps like burglary so that one doesn’t need to physically monitor the cam feeds.

## # Technology:

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Python (Coding)

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OpenCV (Computer Vision)

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Firebase (Realtime feed to user)

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Twilio API (Alerts)

# # Overview:



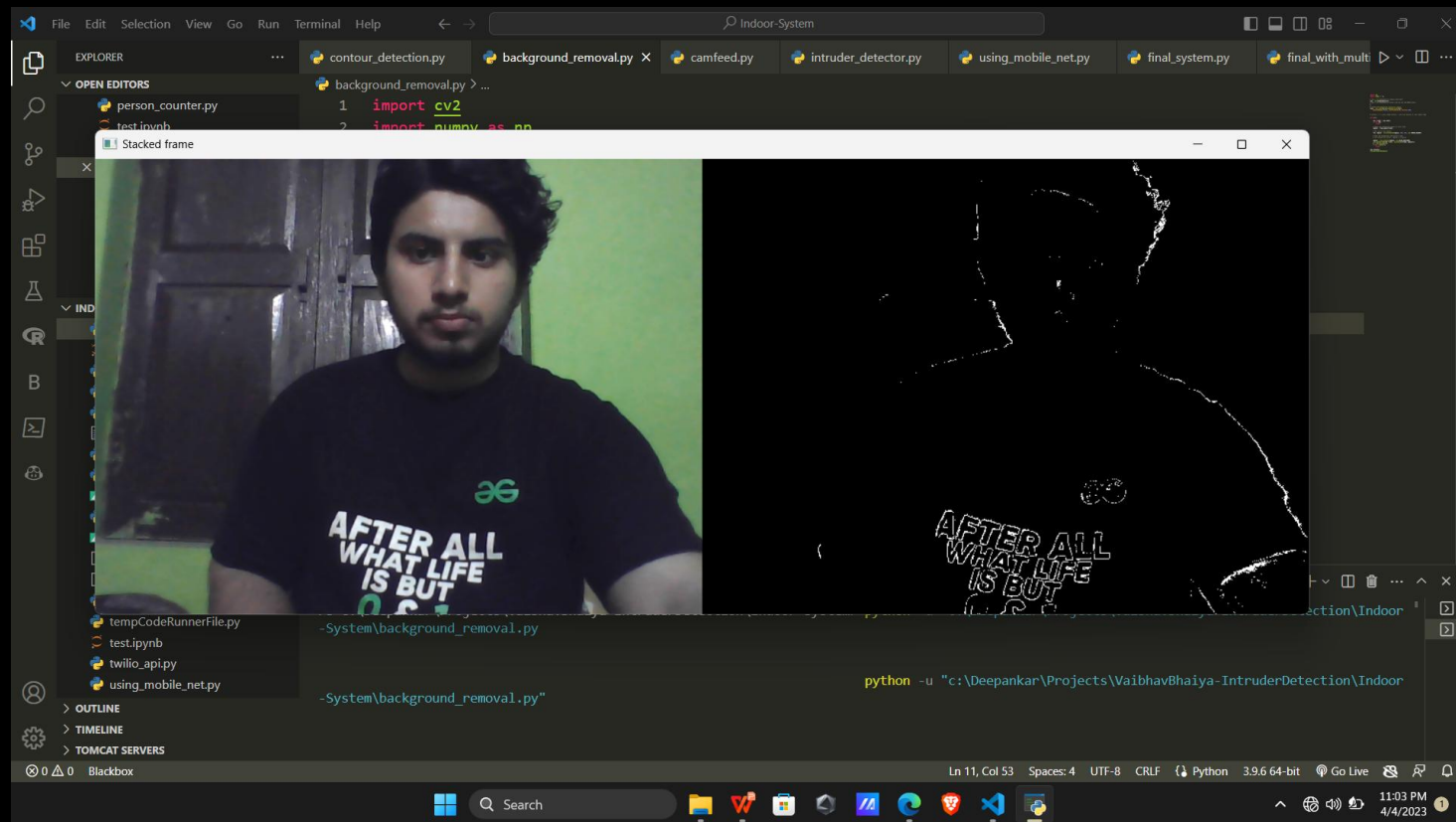
Here our model will  
do some  
processing !!!!!



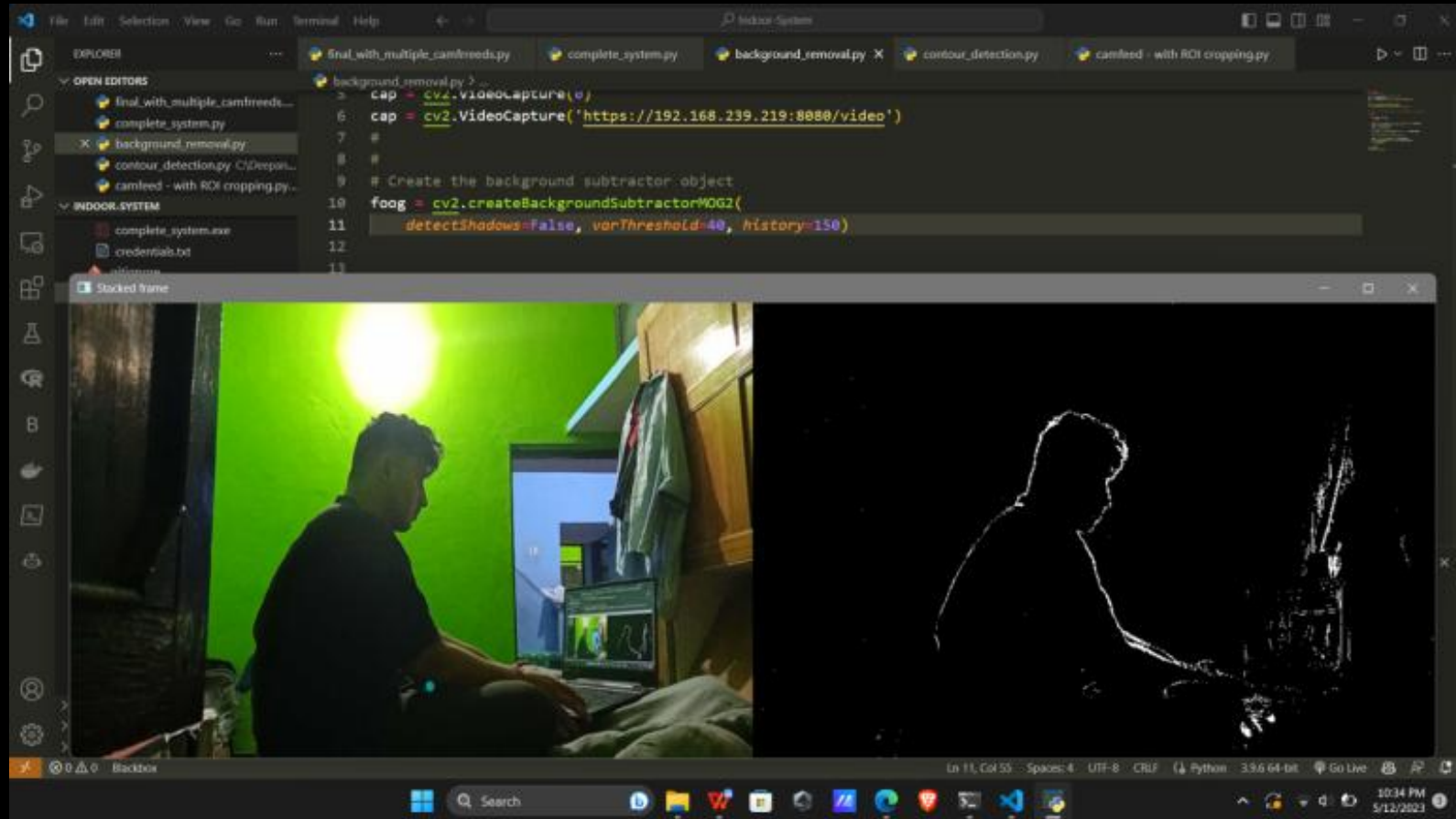
Bro , there's theif  
in the house !!!!



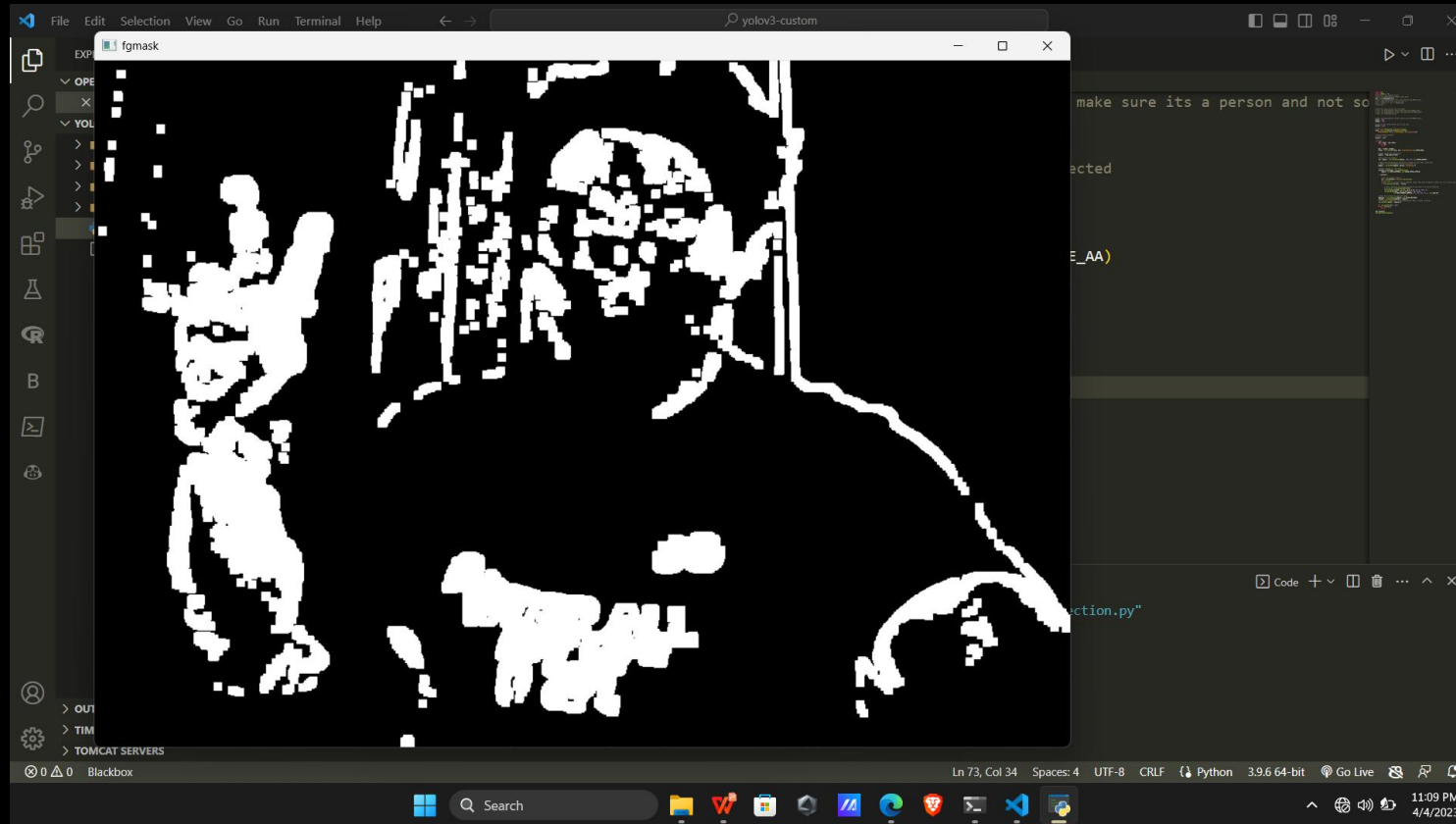
# # Progress: Motion Detection via Background Subtraction



# # Progress: Dilation



# # Progress: Countour Plotting





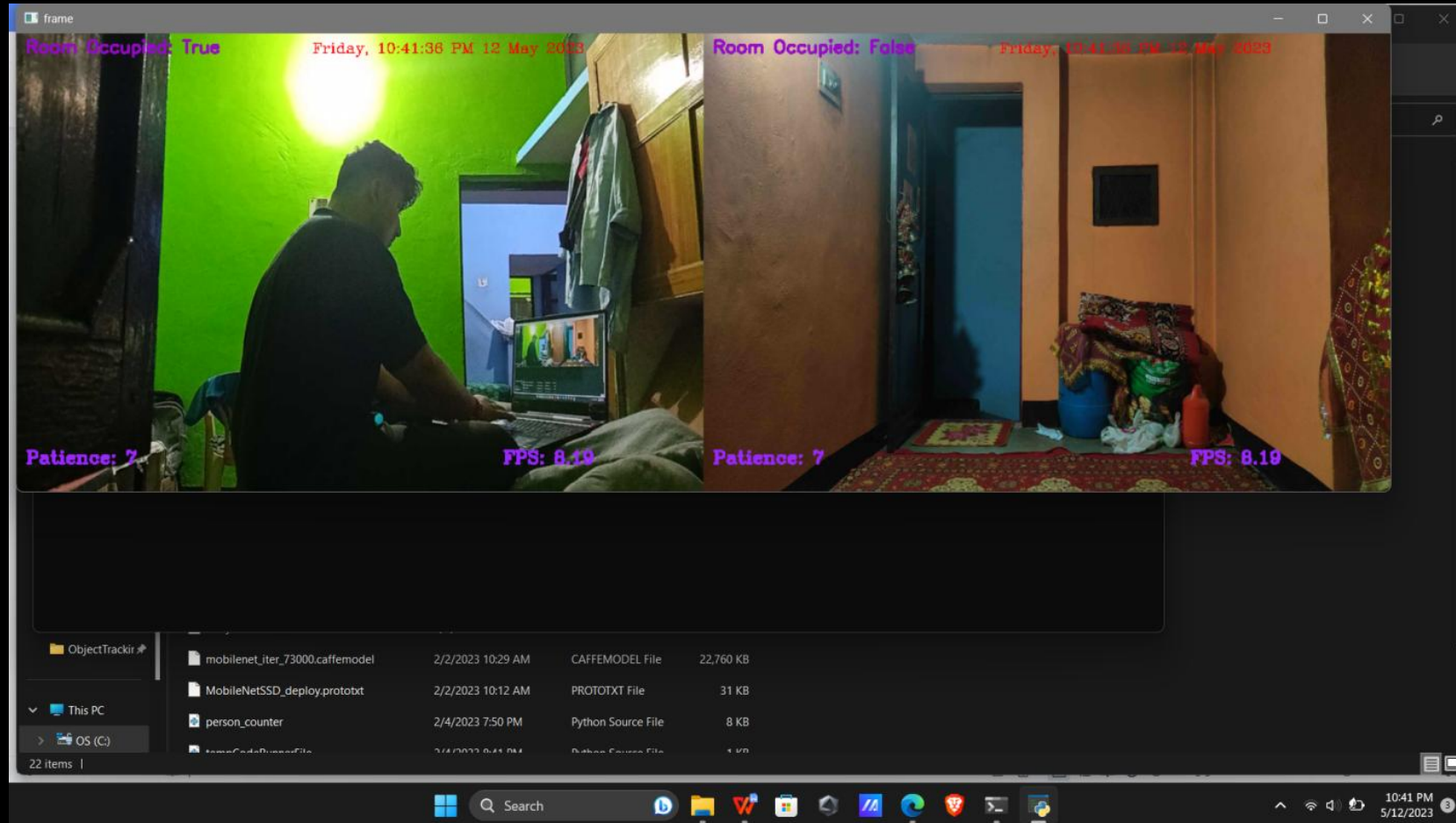
# Why Contours.....

Computational Efficiency

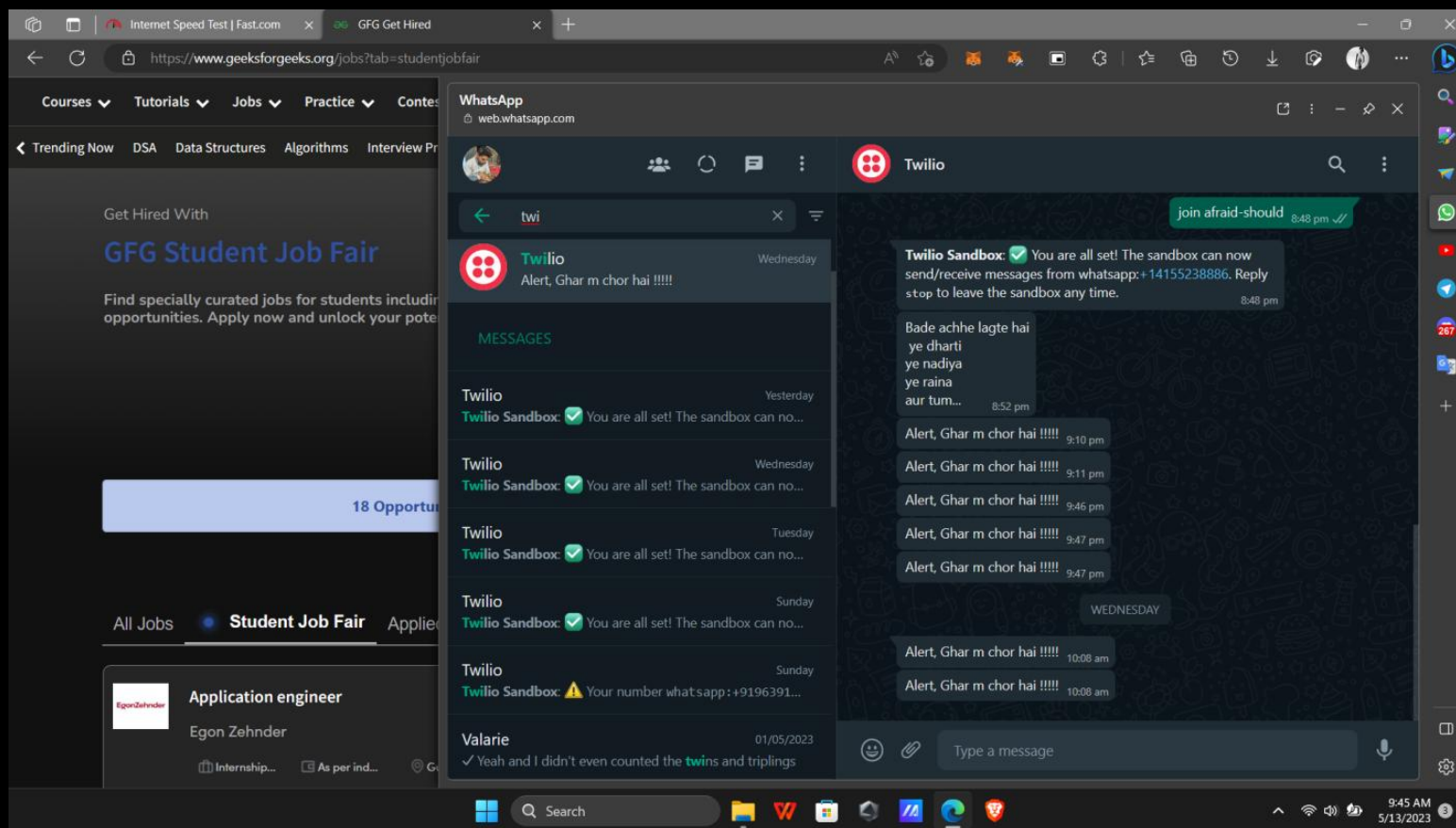
Faster Processing

Effective at a certain height, when  
people are of size of contours

# # Progress: Complete Integration



## # Progress: Alert Generation



# Only Motion Detection?

Further Advancements: Pipelined yolo v3 people tracking





# YOLOv3 on realtime feed



Thank You !!