



# **FINAL YEAR PROJECT**

**DROWSINESS DETECTION SYSTEM**





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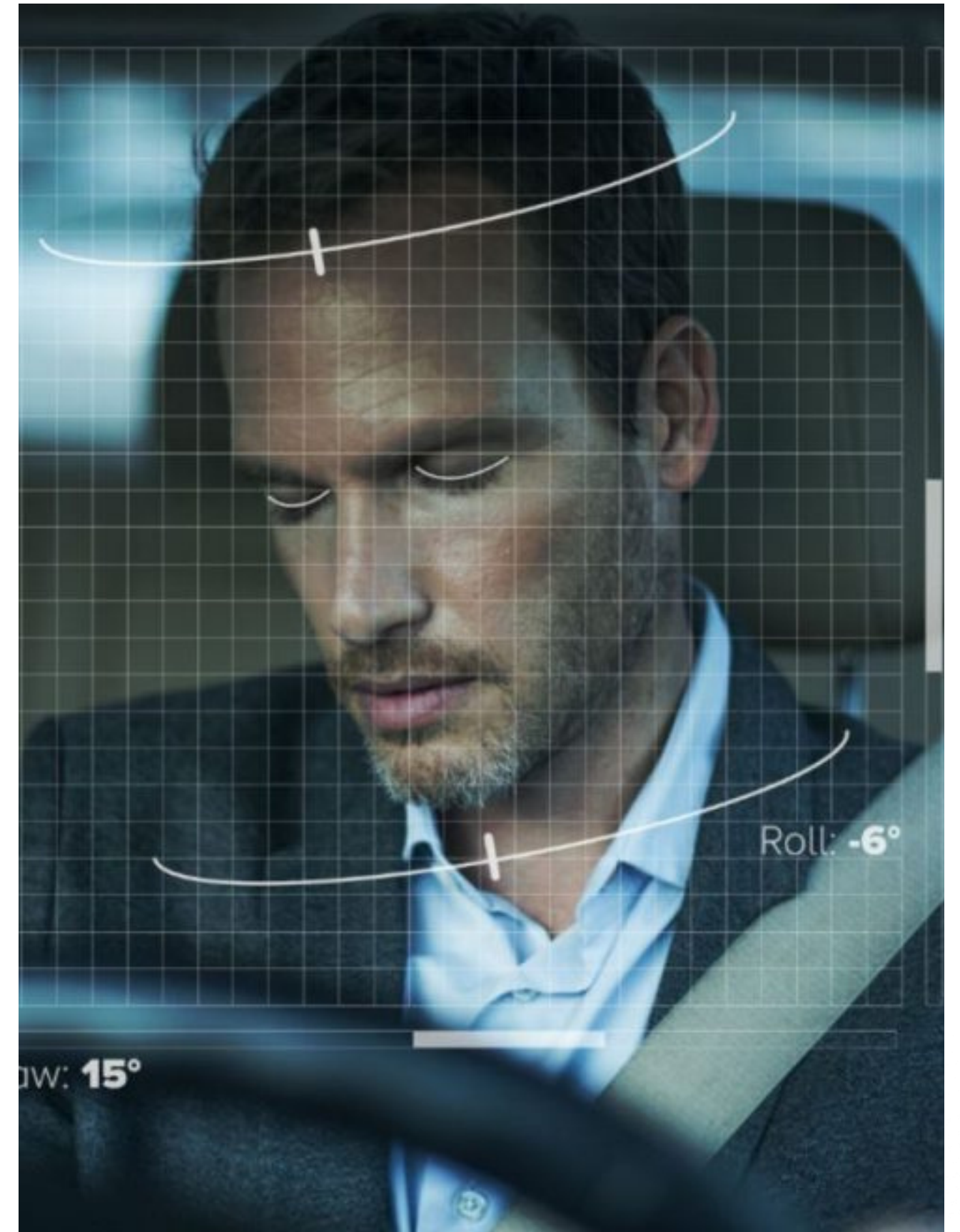
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# INTRODUCTION

Drowsiness prediction is a critical task in various domains, especially in transportation safety, healthcare, and industries where alertness and attentiveness are essential. The goal of drowsiness prediction is to anticipate when an individual is likely to become drowsy, fatigued, or less alert. This prediction can help prevent accidents, improve performance, and enhance safety



# APPLICATIONS

## Transportation

### Driver Drowsiness Detection:

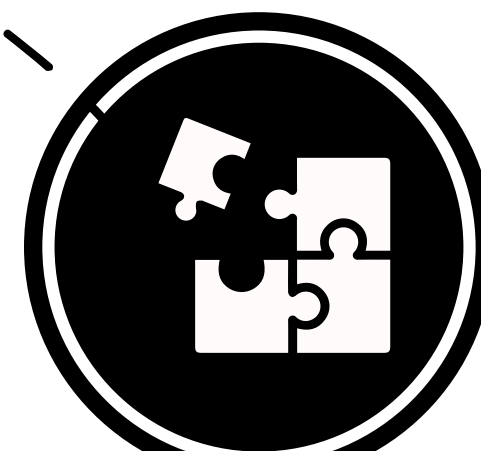
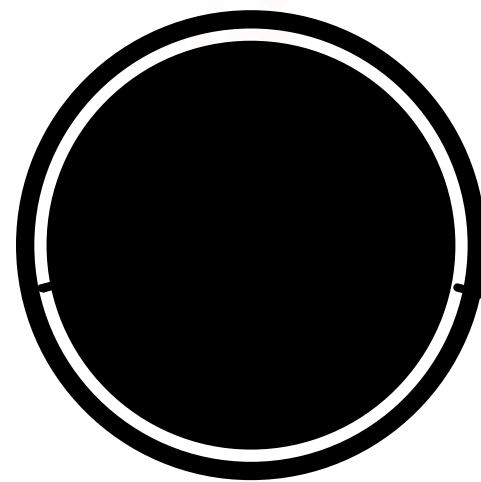
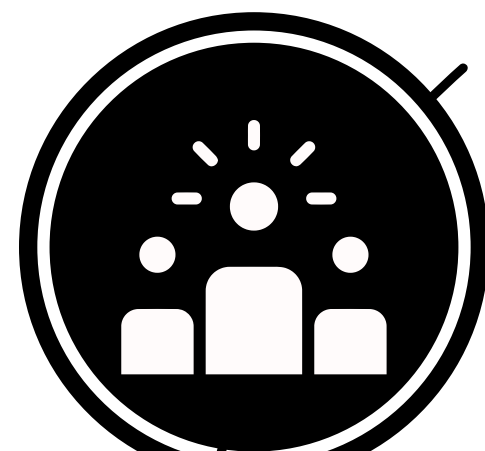
Drowsiness detection systems in vehicles can monitor a driver's behavior, such as eye movement, head position, and steering patterns, to alert the driver when they are becoming drowsy. This is crucial for preventing accidents caused by drowsy driving.

## Industrial and Workplace Safety

Heavy Machinery Operators: Operators of heavy machinery, such as construction equipment and factory machines, can benefit from drowsiness detection systems to reduce the risk of accidents caused by fatigue.

## Education

Student Alertness: Drowsiness detection is used in educational settings to monitor and improve student alertness, especially in long-duration lectures or online learning environments..



# TECHNOLOGY USED



**01**

CONVOLUTIONAL NEURAL NETWORKS

**02**

COMPUTER VISION

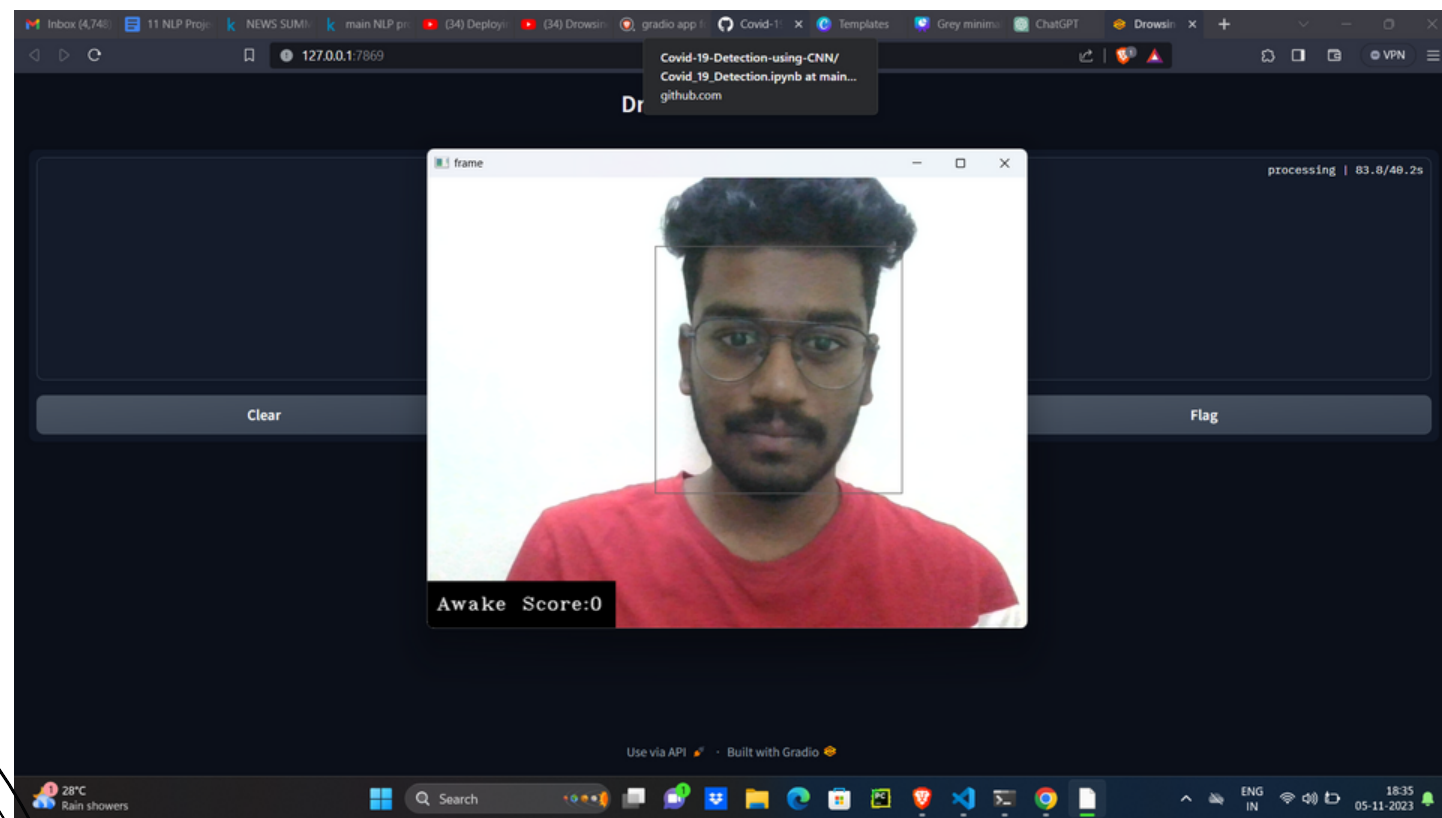
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GRADIO

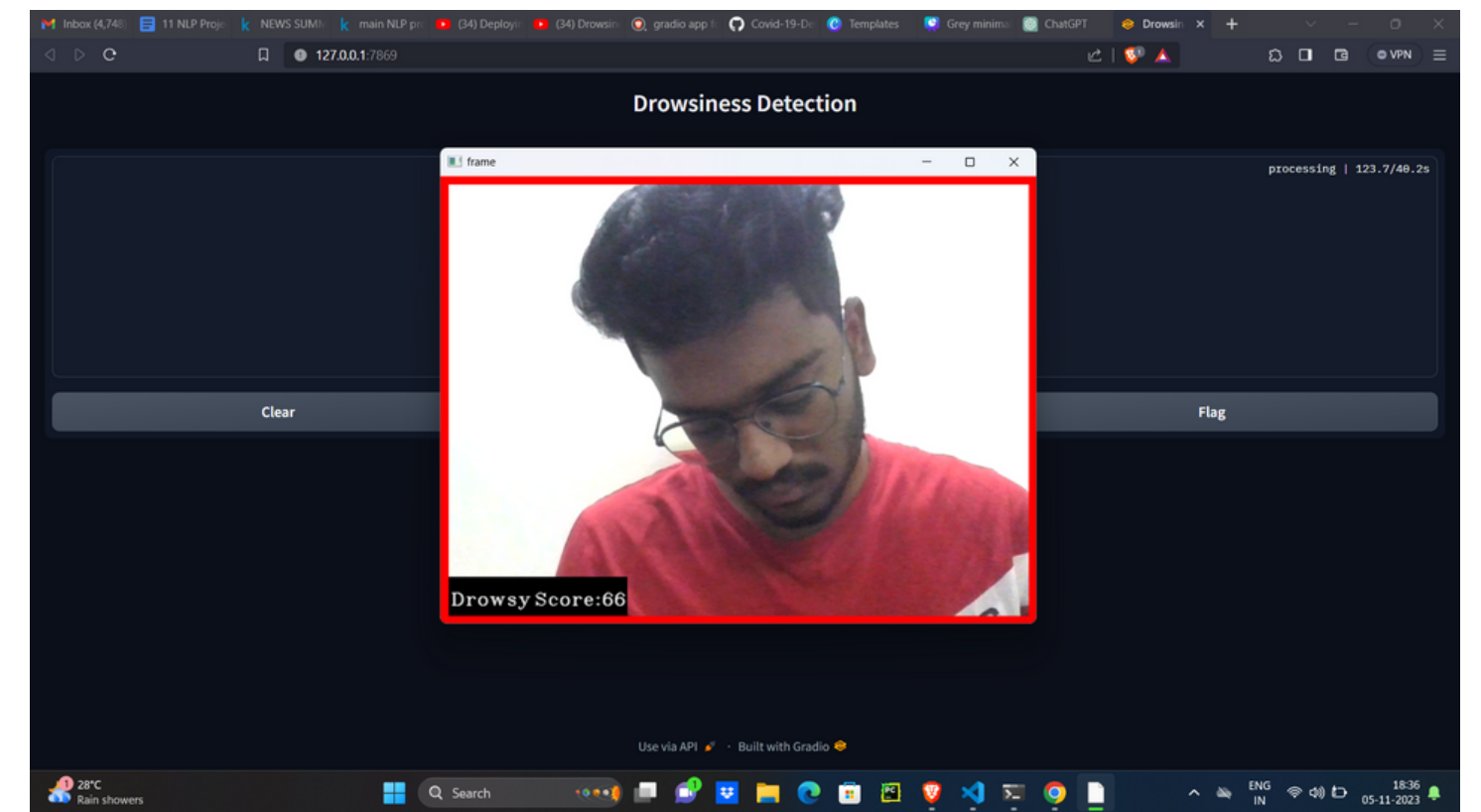




# RESULTS



## AWAKE



## DROWSY

**THANK  
YOU**

