



Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem - 533437

DEPARTMENT OF INFORMATION TECHNOLOGY

B. Tech 4/4, II-SEMESTER

II Semester 2021-22

REAL -TIME FACE MASK DETECTOR AND ALERT SYSTEM

ABSTRACT

In Today's pandemic world, we all know the year 2020 has brought an alarming pandemic with it and day by day, we are reaching a new peak of COVID cases. The best way to keep you and other people safer is to make sure the level of COVID-19 in your community is very low is by wearing masks. Very sadly, people are not obeying these rules properly which is speeding the spread of this virus. Detecting the people not obeying the rules and informing the corresponding authorities can be a solution in reducing the spread of coronavirus. A face mask detection is a technique to find out whether someone is wearing a mask or not. It is similar to detect any object from a scene. Masks should be used as part of a comprehensive strategy of measures to suppress transmission and save lives. This is to ensure that at least all people coming under our surveillance camera wears mask and that too properly. The neural network is trained with the help of masked and unmasked image datasets. If the system found out a person with no mask or not wearing it properly an alarm buzz outs to alert the management and it says that the person would not be allowed into enter. We will build a real-time system to detect whether the person in front of our surveillance system is wearing a mask or not. We will train the face mask detector model using Keras and OpenCV packages in Python. We are using CNN algorithm in Deep Learning for this system.

Course Outcomes (COs)

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
CO1	Demonstrate the technical knowledge to identify problems in the field of Information Technology and its allied areas.	Understand
CO2	Use literature to identify the objective, scope and the concept of the work.	Apply
CO3	Analyze and formulate technical projects with a comprehensive and systematic approach.	Analyse
CO4	Identify the modern tools to implement technical projects.	Evaluate
CO5	Design engineering solutions for solving complex engineering problems.	Create
CO6	Develop effective communication skills, professional behaviour and team work.	Understand

CO-PO/PSO MATRIX:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
CO1	2	2	1	1					3	1	1	1	2	2	
CO2	2	2	1	1					3	2	2	2	2	2	
CO3	2	3	2	2					3	2	2	2	2	1	1
CO4	2	1	3	2	3				3	2	2	2	3	2	1
CO5	2	2	3	3	1				2	2	1	2	3	3	2
CO6	2			2	1				2	3	3	3	1	1	2
Course	2.0	1.7	1.7	1.8	0.8				2.7	2.0	1.8	2.0	2.2	1.8	1.0

PO1	Engineering Knowledge	PO7	Environment & Sustainability
PO2	Problem Analysis	PO8	Ethics
PO3	Design / Development of Solutions	PO9	Individual & Team Work
PO4	Conduct Investigations of complex problems	PO10	Communication Skills
PO5	Modern Tool usage	PO11	Project Management & Finance
PO6	Engineer & Society	PO12	Life-long Learning