# GOVERNMENT COLLEGE OF ENGINEERING AMRAVATI

# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

## CERTIFICATE



This is to certify that students of THIRD YEAR of the course Computer Science and Engineering have submitted this report as a part of project as prescribed by the college for the project entitled, 'INTRUDER DETECTION FOR SECURED WORKSTATION ENVIRONMENT 'and I have guided for the said work from time to time and I have found them to be satisfactory progressive. This is the record of their work under my guidance and to my immense satisfaction.

### Submitted by

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# DECLARATION

We undersigned the students of **Bachelor of Technology** in **Computer Science and Engineering** at **Government College of Engineering, Amravati** declare that the minor project work entitled **"INTRUDER DETECTION"** is the outcome of my own work and has been carried out taking care of engineering ethics. This work has not infringed any patented work and has beensubmitted to other University or elsewhere for the award of any degree or professional diploma to the best of my knowledge.

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# ACKNOWLEDGEMENT

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# ABSTRACT

In today's world, System Security and Secured WorkStation are of paramount importance in the digital environment era. On per with the developments in technology, many threats have emerged for information security which has worse effects when it comes to sensitive data information. Essentially, any system requiring security must be protected from attacks Intrusion detection systems are used to detect unusual activity in a any workstation environment to identify if activity is unfriendly or unauthorized in order to enable a response to that violation. To achieve this, there are two main types of IDS: network-based and host-based. This paper outlines these two types of IDS respectively and highlights the advantages of each kind.

Intruders can easily break the walls of the network and can cause many kinds of breaches such as the crash of the networks, Denial Of Service, injecting Malware and so on, So Its really necessary to protect our workstation from intruders In order to avoid those breaches, it is badly needed for a security administrator to detect the intruder and prevent him from entering into the workstation area. In daily life, new threats and associated solutions are emerging together we can take use of such emerging technologies and provide secured workstation environment.

A Hybrid Intrusion Detection System by leveraging the benefits of Machine Learning techniques to build a system which detects the intrusion and alerts the respective network administrator. This can be extended from Intrusion to breach detection as well. The developed system analyses and predicts the behaviour of users which in turn classifies as an anomaly or a normal behaviour.