DECLARATION

We hereby declare that all the work presented in the dissertation entitled **“Intrusion Detection System”** in the partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in **Computer Science,** Maharaja Surajmal Institute of Technology, affiliated to Guru Gobind Singh Indraprastha University Delhi is an authentic record of our own work carried out under the guidance of **Ms. Gunjan Beniwal**

Amit Sharma (00713102713)
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Nishant Kumar (00396307214)

Date:

CERTIFICATE

This is to certify that the project entitled Hardware Based Intrusion Detection System is a bonafide work carried out by Amit Sharma, Atif Ahmed and Nishant Kumar under my guidance and supervision and submitted in partial fulfilment of B.Tech degree in Computer Science Engineering of Guru Gobind Singh Indraprastha University, Delhi. The work embodied in this project has not been submitted for any other degree or diploma.

Ms. Gunjan Beniwal	**Mr.Naveen Dahiya**
(Project Guide)	(Head of Department)

Date:

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ABSTRACT

Intrusion-detection systems aim at detecting attacks against computer systems and networks or, in general, against information systems. Indeed, it is difficult to provide provably secure information systems and to maintain them in such a secure state during their lifetime and utilization. Sometimes, legacy or operational constraints do not even allow the definition of a fully secure information system. Therefore, intrusion detection systems have the task of monitoring the usage of such systems to detect any apparition of insecure states. They detect attempts and active misuse either by legitimate users of the information systems or by external parties to abuse their privileges or exploit security vulnerabilities.

Intrusion detection based upon computational intelligence is currently attracting considerable interest from the research community. Characteristics of computational intelligence (CI) systems, such as adaptation, fault tolerance, high computational speed and error resilience in the face of noisy information fit the requirements of building a good intrusion detection model. Here we want to provide an overview of the research progress in applying CI methods, such as fuzzy logic and genetic algorithm to the problem of intrusion detection. The scope of this review will be on core methods of CI, fuzzy systems, evolutionary, Genetic algorithm, and soft computing.

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