A Project Report on

AWS Cloud and Network Security

Submitted in partial fulfillment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS & COMMUNICATION ENGINEERING

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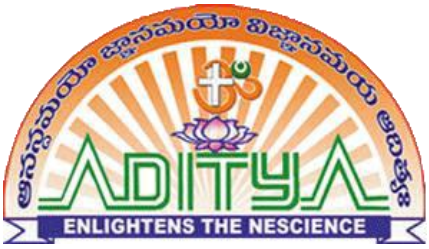

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ADITYA ENGINEERING COLLEGE

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ADITYA NAGAR, ADB ROAD, SURAMPALEM

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CERTIFICATE

This is to certify that the project report entitled **"AWS Cloud And Network Security"** is a bonafide record of the project work done by

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under my supervision and guidance, for the partial fulfillment of the requirements for the award of the degree of **Bachelor of Technology** in the Department of Electronics & Communication Engineering of Aditya Engineering College (A) from Jawaharlal Nehru Technological University, Kakinada for the year 2015-19.

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ABSTRACT

AWS Cloud is used to handle thousands of requests (traffic load) on a web portal when millions of users want to access the same webpage. When the user hits on a certain URL and if the requests are more on that URL the traffic load will be more. There will be lagging of the site and can't be accessed by all the users at a time, to avoid this problem we are going to change the existing policies in AWS Cloud, and create virtual instance servers by using AWS.

This is to maintain auto-scaling and load balancing on a certain web portal. In Load Balancers, Elastic Load Balancing automatically distributes your incoming traffic across multiple targets, such as EC2 instances. Auto-scaling monitors your applications and automatically adjusts capacity to maintain steady and better performance at the lowest cost. Monitoring the atmosphere information of the area, In that temperature, humidity, raining status of the details. These are achieved by IoT Technology. Network security consists of the policies and practices to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources.

Network security consists of the policies and practices to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources. To connect different branches with security, we are implementing SITE TO SITE VPN. To overcome the network attacks, these network security infrastructure are implementing in On-premises, not in a cloud.

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NOMENCLATURE

SAAS	-	Software as a Service
IAAS	-	Infrastructure as a Service
PAAS	-	Platform as a Service
AWS	-	Amazon Web Services
ARP	-	Address Resolution Protocol
DHCP	-	Dynamic Host Configuration Protocol
MQTT	-	Message Queuing Telemetry Transport
URL	-	Uniform Resource Locator
EC2	-	Elastic Cloud Compute
LB	-	Load Balencer
AS	-	Auto Scale
IOS	-	Internetwork Operating System
VPN	-	Virtual Private Network
DB	-	Database