

**GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCHES**  
**ANALYSIS OF DDOS ATTACKS TO PREVENT CLOUD COMPUTING**  
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**ABSTRACT**

Geopolymer concrete is a recent development in the concrete research aiming for an alternate for the conventional cement concrete. As the rate of emission of CO<sub>2</sub> from cement and concrete industries is increasing day by day, more more researchers are diverted to investigate an alternate binder to conventional Portland cement. Geopolymer in its most effective development process involve the utilisation of a source material with sodium based alkaline activator and hot curing at 60°C-100°C. However, it is still in the laboratory level due to many constraints like, typical constituents, casting procedure, hot curing and compatibility with the reinforcing or prestressing steel. Also, most of the works reported are based on low calcium flyash and only a few studies using high calcium flyash. Therefore, being more cementitious, development of GPC using high calcium flyash with sodium based activating solution having liquid ratio of 2.5 is ideal. The influence of Molarity on the workability and strength of three grades of GPC equivalent to conventional M20, M30 and M40 grades of cement concrete are studied. It is observed that the expected strength of GPC can be achieved for specific molarity of NaOH by hot curing.

**Keywords:** Class C flyash, alternative binders, Geopolymer concrete, activating solution, hot curing

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**I. INTRODUCTION**

A Distributed system Denial of Service (DDoS) attack is a distributed management system, coordinated attack on the availability available of services of the host server to provide (application server system, storage system, database Server system, or DNS server system) or network resource, to launched indirectly through many area compromised system to called botnets area on the Internet system. Since its inception system, distributed denial-of-service (DDoS) system attacks have evolved over the many years. As mentioned to above, DDoS system attacks has been a major challenges to the provide researchers and big security issue display to the cloud environment. very sophisticated approaches, by assuming multiple target on the cloud resources system, applications or network system, hackers use multiple system vectors and do not take any risk of missing the cloud resources in a single attack. DDoS system attacks can range from simple network attacks to all cloud system resources attacks. They can be volumetric, designed to disrupt system host service and make it unreachable, or attack system application system layers, targeting a specific service on the host. DDoS use of system multiple botnet machines to amplify attacks could system make it very Challenging to system stop it or to trace back the hackers .

Many researches have been conducted system and as many number of different DDoS detection techniques have been system proposed. Among these was a simple and system efficient hidden system mark model scheme for host system based anomaly intrusion detection . An entropy based anomaly detection system to prevent DDoS attacks in cloud system was reviewed, explored system investigated and proposed system as an alternative solution. After investigating the correlativity changes of monitored system network features during system flood attacks, a covariance-Matrix system modelling and detecting various flooding attacks was proposed system. An experiment result was also analyzed and presented to support a model that was instrumental system propose a model to detect flood based DDoS attack in cloud system environment. It provided research results that support how system effectively the flood attacks are detected

**II. METHOD & MATERIAL**

Use case modeling identifies System and describes the system functions by using a tool called use cases System. Use cases describe the system functions System from the perspective of external users and in a manner and terminology System they understand. To accurately and thoroughly System accomplish this demands a high level of user involvement and a subject matter expert System who is knowledgeable about the busi-ness process or event.

- 1) Login
- 2) Upload Data For Encryption
- 3) Generate & Store Key
- 4) Algorithm Processing
- 5) Set Packet Limit
- 6) Request Filtering
- 7) Attack Monitoring
- 8) Attack Notification

### **III. OTHER SECTIONS**

#### **Existing system**

Considering how hackers are using very sophisticated System attacking tools and methods to intrude System and disrupt the systems, the road ahead for the next generation of intrusion detection system is very challenging and need a collective effort. Besides preventing these attacks, it should be also realized that any intended detection scheme should take System into consideration of the advancement of the networking technology and major System changes in systems like cloud computing System environment. The main challenge System in detecting such attacks System efficiently is the reduction of the false alarm rate. System Different types of DDoS detection methods have been System proposed based on different architectures namely, victim-end, source-end, and in-network. These methods include System statistical methods, soft System computing methods, knowledge based System methods, and data mining and machine learning methods System. While the important of these detection System schemes is to defend to itself from attacks, those traditional attack intrusion detection systems have not adapted to new technological platform paradigms like mobile System and wireless networks. Different schemes have been provided used with these detection mechanisms. The following System table discusses the advantages and disadvantages of different detection schemes.

#### **Proposed system**

- 1) Security Level 1 – Data store using encryption
- 2) Security Level 2- Create user using OTP
- 3) Security Level 3- Data Retrieval Using Key
- 4) Security Level 4 – DDoS Attack Block

### **IV. RESULT & DISCUSSION**

Input (I): Cloud Gather & store Data from Different Source

Output (O): Detect DDoS attack Detection On cloud

Data Structures (Ds):

Algorithm – Shaping Algorithm

Functional relations –

1. Data Storage Using Cryptography,
2. File Retrieval Using Key
3. DDOS Attack Prevention Algorithm.

Mathematical formulation  $S = I, O, Wc, Sc, Fc, Ds$

Success Conditions (Sc) If DDoS Attack found then successfully

Generate warning error

Failure Conditions (Fc): DDoS Attack is Not Found then Show Secure Message

## V. CONCLUSION

we proposed an effective alternative hybrid scheme against DDoS attacks based on Entropy and Covariance Matrices. We are looking forward to apply a different approach with a comprehensive hybrid detection scheme at both the network and host level. Because, many of the available DDoS detection schemes performance found to be below the par and DDoS attacks are growing exponentially, it prompts the real need of having a comprehensive solution. We believe that this proposed scheme with double check points is expected to be a better alternative solution in mitigating the risk significantly by producing a better result.

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