

Home (<https://ipindia.gov.in/>) About Us (<https://ipindia.gov.in/Home/AboutUs>) Policy & Programs (<https://ipindia.gov.in/Home/policypages>)
 Achievements (<https://ipindia.gov.in/Home/achievementspage>) RTI (<https://ipindia.gov.in/Home/righttoinformation>)
 Sitemap (<https://ipindia.gov.in/Home/Sitemap>) Contact Us (<https://ipindia.gov.in/Home/contactus>)

[Skip to Main Content](#)



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic>)

Patent Search

Invention Title	SECURING CLOUD DATA WITH A HYBRID APPROACH: MACHINE LEARNING AND CRYPTOSYSTEMS		
Publication Number	06/2024		
Publication Date	09/02/2024		
Publication Type	INA		
Application Number	202441006259		
Application Filing Date	31/01/2024		
Priority Number			
Priority Country			
Priority Date			
Field Of Invention	COMPUTER SCIENCE		
Classification (IPC)	G06N0003040000, G06N0003080000, H04L0009300000, G06F0021620000, G06F0007720000		
Inventor			
Name	Address		Country
Dr. J Lenin	Professor and Head - Computer Applications School of Advance Computing Alliance University Anekal Bengaluru, Karnataka 562 106		India
Veeresh Biradar	Assistant Professor, Computer Science and Engineering Department, Lingaraj Appa Engineering College, Bidar, Karnataka		India
Anjan Kumar Reddy Ayyadapu	Bigdata Solution Architect/ IT, Cloudera, Ashburn, Loudoun County, Virginia, USA		India
Pravesh	Assistant professor/BCA Department, Dr. Knmiet Modinagar, Ghaziabad, Uttar Pradesh, Pin-201204		India
Prof. Shilpa Sachin Bhojne	Assistant professor, SOCSE, Sandip University, Nashik, Maharashtra 422011		India
Jeyarani R	Senior Assistant Professor, Department of Computer Science, New Horizon College, Kasturi Nagar, Bangalore, Karnataka -560043		India
L. Panneer Dhas	Assistant professor/CSA, KL to be Deemed University, Vaddeswaram, Guntur, Vijayawada, Andhra Pradesh 522502		India
Neerav Nishant	Assistant Professor, Department of Computer Science and Engineering, School of Engineering, Babu Banarasi Das University, Lucknow, Uttar Pradesh, India		India
M. Sakthivel	Assistant Professor/CSE, Erode Sengunthar Engineering College, Perundurai, Erode-638057, Tamilnadu, India.		India
Dr.D. Balraj	Assistant Professor, Department of Mathematics, Kongunadu College of Engineering and Technology, Tiruchirappalli- 621 215, Tamilnadu, India.		India
Dr.E.S. Shamila	Professor, Department of CSE, Jansons Institute of Technology, Coimbatore 641659, Tamilnadu, India.		India
Dr. Deshmukh Narendra Pandurang	Assistant Professor, Dattakala Group of Institutions, Faculty of Management, A/P Swami chincholi, Tal Daund, Dist Pune, Maharashtra 413130		India
Applicant			

Name	Address	Country
Dr. J Lenin	Professor and Head - Computer Applications School of Advance Computing Alliance University Anekal Bengaluru, Karnataka 562 106	India
Veeresh Biradar	Assistant Professor, Computer Science and Engineering Department, Lingaraj Appa Engineering College, Bidar, Karnataka	India
Anjan Kumar Reddy Ayyadapu	Bigdata Solution Architect/ IT, Cloudera, Ashburn, Loudoun County, Virginia, USA	U.S.A.
Pravesh	Assistant professor/BCA Department, Dr. Kmiet Modinagar, Ghaziabad, Uttar Pradesh, Pin-201204	India
Prof. Shilpa Sachin Bhojne	Assistant professor, SOCSE, Sandip University, Nashik, Maharashtra 422011	India
Jeyarani R	Senior Assistant Professor, Department of Computer Science, New Horizon College, Kasturi Nagar, Bangalore, Karnataka -560043	India
L. Panneer Dhas	Assistant professor/CSA, KL to be Deemed University, Vaddeswaram, Guntur, Vijayawada, Andhra Pradesh 522502	India
Neerav Nishant	Assistant Professor, Department of Computer Science and Engineering, School of Engineering, Babu Banarasi Das University, Lucknow, Uttar Pradesh, India	India
M. Sakthivel	Assistant Professor/CSE, Erode Sengunthar Engineering College, Perundurai, Erode-638057, Tamilnadu, India.	India
Dr.D. Balraj	Assistant Professor, Department of Mathematics, Kongunadu College of Engineering and Technology, Tiruchirappalli- 621 215, Tamilnadu, India.	India
Dr.E.S. Shamila	Professor, Department of CSE, Jansons Institute of Technology, Coimbatore 641659, Tamilnadu, India.	India
Dr. Deshmukh Narendra Pandurang	Assistant Professor, Dattakala Group of Institutions, Faculty of Management, A/P Swami chincholi, Tal Daund, Dist Pune, Maharashtra 413130	India

Abstract:

SECURING CLOUD DATA WITH A HYBRID APPROACH: MACHINE LEARNING AND CRYPTOSYSTEMS A method for the development To achieve higher levels of security in environment, one of the most critical parts of cloud service provisioning is preventing data breaches caused by unauthorized access to personal information. Many security procedures have still to be improved to an appropriate level. There are several approaches for achieving data and information security, such as cryptography and steganography. This study presents a novel technique to mutual authentication that use a pre-trained model of a convolutional neural network (CNN) to detect illicit internet activities: two types of prime field operations: one that involves field multiplication and field squaring of elliptic curve point coordinates, and another that involves field addition, doubling, and field subtraction of elliptic curve point coordinates. The method for countering a subchannel attack on the elliptic curve cryptosystem described in the invention is advantageous in that it improves cryptosystem stability while lowering the system's computational overhead. FIG.1

Complete Specification

Description:SECURING CLOUD DATA WITH A HYBRID APPROACH: MACHINE LEARNING AND CRYPTOSYSTEMS

Technical Field

[0001] The embodiments herein generally relate to a method for a securing cloud data with a hybrid approach: machine learning and cryptosystems.

Description of the Related Art

[0002] The Cloud computing is predicted to become a critical component of the enterprise IT infrastructure of tomorrow. Data centers, like the cloud, store and transfer data between servers and clients. Users can store their data in the cloud and use high-quality cloud apps without having to worry about maintaining their own servers or installing new software. Our method combines hybrid cryptography's benefits with the power of deep learning to deliver a robust and adaptable solution for cloud security. ECCs are based on mathematical entities known as elliptic curve groups. An elliptic curve group is defined as an Elliptic Curve (EC), which is a collection of points known as "the points," to an elliptic curve equation, as well as a suitably defined operation between the curve's points. As a result, this data is subject to unauthorized access as well as other privacy and security breaches. Cryptography and steganography are well-known data protection mechanisms in computer security.

[0003] Reduced storage costs, virtualization, grid computing technologies, service-oriented software, power efficiency, and huge facility management are some of the fundamental elements that make cloud computing more efficient. The former are also known as prime fields, integer fields, or fields with a prime characteristic; their elements are integers, and addition and multiplication are defined modulo a prime number. The latter are also known as binary polynomial fields or fields of characteristic 2, and their constituents are binary polynomials. The operations of addition and multiplication are defined as the addition and multiplication of polynomials modulo an irreducible polynomial. Because of the widespread usage of the internet, multimedia distribution is becoming an increasingly important method of worldwide service.

[View Application Status](#)



**Department of Industrial
Policy and Promotion**
Government of India

Terms & conditions (<https://ipindia.gov.in/Home/Termsconditions>) Privacy Policy (<https://ipindia.gov.in/Home/Privacypolicy>)

Copyright (<https://ipindia.gov.in/Home/copyright>) Hyperlinking Policy (<https://ipindia.gov.in/Home/hyperlinkingpolicy>)

Accessibility (<https://ipindia.gov.in/Home/accessibility>) Contact Us (<https://ipindia.gov.in/Home/contactus>) Help (<https://ipindia.gov.in/Home/help>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019