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Patent Search

Invention Title	The intuition of the analyst is based on Markov constructs a model on top of high-speed, temporal big data for cyber security
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Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	G06F0017180000, G06F0017110000, G01N0029440000, G06T0007000000, G06F0011070000

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Abstract:

[05] Big data analytics, the study of extracting relevant information from enormous datasets, is becoming increasingly popular. Due to the rising use of sensor technology information and communication technologies, businesses now have access to vast quantities of high-dimensional, streaming, and nonlinear data that was not before available. Error detection in this data is an important use case for eMaintenance systems since it facilitates maintenance decision-making. If problems in these systems are detected fixed as quickly as possible, system reliability and security can be enhanced, and the risk of unplanned system failures can be avoided. A primary challenge for fault-detect systems is the complexity of the underlying data, which may manifest as high dimensionality, fast-moving data streams, and strong nonlinearity. In data modelling, the "curse of dimensionality" is a well-known topic. As the number of dimensions rises, the effectiveness of defect detection technologies decreases. To keep up with the processing requirements of rapidly-flowing data streams, algorithms must be able to respond to incoming samples almost quickly. In order to minimise overfitting and underfitting, fault detection systems must communicate effectively when there is a great deal of nonlinearity. Current defect detection methods are most effective in settings with fewer dimensions. The vast majority of theoretical work on high-dimensional defect identification has focused on outlier detection in subspace projections. However, in both model subspace selection is either wholly random or time-consuming. Multiple strategies have been proposed for making current models accessible online so that they can be used for stream data mining. This is necessary if you desire to satisfy the requirements of real-time data streams. However, only a few of research groups have attempted to simultaneously manage large dimensionality and streaming data. Existing methods for detecting nonlinear defects are insufficient in terms of smoothness, efficiency, robustness and clarity. To effectively handle this issue, we must employ creative strategies. Accompanied Drawing [FIG. 1] [FIG. 2][FIG. 3]

Complete Specification

Description:The present invention relates to cyber security.

[02] BACKGROUND OF THE INVENTION

Our digitally dependent civilization has taught us two very important things. First, we must determine how to transform huge amounts of data into information that businesses can use to make prudent business decisions. We are responsible for ensuring that the information is accurate and stored on secure networks. Consequently, data science and cyber security have evolved as independent academic disciplines. Cybersecurity is the practise of preventing unauthorised access to computer systems networks, and information. It also involves preserving data accessibility, confidentiality, and integrity. This is what the word "data security" represents on the Internet. Data science would not exist without the security precautions offered by cybersecurity. To conduct research and assure the accuracy of data processed from it, data scientists need data that is pure and unaltered. Because information in any form can be harmful, data scientists look to cyber security studies for direction on how to safeguard information.

[03] SUMMARY OF THE PRESENT INVENTION

In the digital age, there are more and more news stories about data breaches, identity theft, cyberattacks, and online fraud. As a result, cyber security is an integral part of numerous industries around the world, including government agencies, the military, enterprises, banks, and hospitals. Whether an organization's data-sharing networks are internal or external, they require a robust cyber security system. This requirement is the primary reason why more and more companies are training their own security personnel. At this time, it is feasible to assert that big data analytics has successfully revolutionised the manner in which cyber security professionals address defects and security issues. It levels the playing field for cyber security professionals and data scientists, who previously faced significant obstacles. Now that they can visually review vast

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Application Details

APPLICATION NUMBER	202241055440
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	27/09/2022
APPLICANT NAME	1 . T Gokaramaiah 2 . Mr. Jahan Malik 3 . Dr. K.Arutchelvan 4 . Dr. D Khalandar Basha 5 . R.Ramachandran 6 . Dr. Avijit Bhowmick 7 . J Sinjini 8 . Mr.T R Arunkumar 9 . Dr.K.P.Uma 10 . Mallikarjuna Reddy Beram 11 . Dr. K.Sivaperumal 12 . Dr. Harikumar Pallathadka
TITLE OF INVENTION	The intuition of the analyst is based on Markov constructs a model on top of high-speed, temporal big data for cyber security
FIELD OF INVENTION	COMPUTER SCIENCE
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ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	14/10/2022

Application Status

APPLICATION STATUS

Awaiting Request for Examination

[View Documents](#)

➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination

➡ Disposed

In case of any discrepancy in status, kindly contact ipe-helpdesk@nic.in

FORM 1 THE PATENTS ACT 1970 (39 of 1970) and THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 and 135 and sub-rule (1) of rule 20)				(FOR OFFICE USE ONLY)	
				Application No.	
				Filing date:	
				Amount of Fee paid:	
				CBR No:	
				Signature:	
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)					
2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]					
Ordinary (✓)		Convention ()		PCT-NP ()	
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()
3A. APPLICANT(S)					
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12. Dr. Harikumar Pallathadka	INDIAN	India	Director and Professor, Manipur International University, Ghari, Imphal, Imphal West, Manipur, India Pin: 795140		
Natural Person (✓)	Other than Natural Person				
	Small Entity ()	Startup ()	Others ()		
4. INVENTOR(S) [Please tick (✓) at the appropriate category]					
Are all the inventor(s) same as the applicant(s) named above?	Yes (✓)		No ()		
If "No", furnish the details of the inventor(s)					
Name in Full	Nationality	Country of Residence	Address of the Inventor		
Same as Applicant					
5. TITLE OF THE INVENTION					
"The intuition of the analyst is based on Markov constructs a model on top of high-speed, temporal big data for cyber security"					
6. AUTHORISED REGISTERED PATENT AGENT(S)		IN/PA No.			
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8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN- CONVENTION					
COUNTRY, PARTICULARS OF CONVENTION APPLICATION					
Country	Application Number	Filing date	Name of the applicant	Title of the invention	IPC (as classified in the convention country)

9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)	
International application number	International filing date
10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION	
Original (first) application No.	Date of filing of original (first) application
11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT	
Main application/patent No.	Date of filing of main application
12. DECLARATIONS	
(i) Declaration by the inventor(s)	
<p>(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).</p> <p>I/We, the above named inventor(s) is/are the true & first inventor(s) for this Invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.</p> <p>(a) Date 27/09/2022</p>	
(b) Name	(c) Signature
1. T Gokaramaiah 2. Mr. Jahan Malik 3. Dr. K.Arutchelvan 4. Dr. D Khalandar Basha 5. R.Ramachandran 6. Dr. Avijit Bhowmick 7. J Sinjini 8. Mr.T R Arunkumar 9. Dr.K.P.Uma 10. Mallikarjuna Reddy Beram 11. Dr. K.Sivaperumal 12. Dr. Harikumar Pallathadka	
(ii) Declaration by the applicant(s) in the convention country	
<p>(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant</p>	

~~in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)~~

~~I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.~~

~~(a) Date~~

~~(b) Signature(s)~~

~~(c) Name(s) of the signatory~~

(iii) Declaration by the applicant(s)

I/We the applicant(s) hereby declare(s) that: -

- I am/We are in possession of the above-mentioned invention.
- The provisional/complete specification relating to the invention is filed with this application.
- ~~The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.~~
- There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- I am/we are the true & first inventor(s).
- ~~I am/we are the assignee or legal representative of true & first inventor(s).~~
- ~~The application or each of the applications, particulars of which are given in Paragraph 8, was the first application in convention country/countries in respect of my/our invention(s).~~
- ~~I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.~~
- ~~My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph 9.~~
- ~~The application is divided out of my /our application particulars of which is given in Paragraph 10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act.~~
- ~~The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph 11.~~

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

(a) Form 2

Item	Details	Fee	Remarks
Complete/ Provisional specification)#	No. of pages : 13		

No. of Claim(s)	No. of claims : 08 No. of pages: 01		
Abstract	No. of pages: 01		
No. of Drawing(s)	No. of drawings: 03 No. of pages: 02		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

- (b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2copies).
- (c) Sequence listing in electronic form
- (d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2copies).
- (e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS.
- (f) Translation of priority document/Specification/International Search Report/International Preliminary Report on Patentability.
- (g) Statement and Undertaking on Form3
- (h) Declaration of Inventorship on Form5
- (i) Power of Authority
- (j) **Total fee ₹.....in Cash/ Banker's Cheque /Bank Draft bearingNo.....
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I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters slated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this 27th day of September, 2022

Signature:

Name: T Gokaramaiah et al.

To,
The Controller of Patents
The Patent Office, at Chennai

Note: -

* Repeat boxes in case of more than one entry.

- * To be signed by the applicant(s) or by authorized registered patent agent otherwise where mentioned.
- * Tick (/) / cross (x) whichever is applicable / not applicable in declaration in paragraph-12.
- * Name of the inventor and applicant should be given in full, family name in the beginning.
- * Strike out the portion which is / are not applicable.
- * For fee: See First Schedule”;