



Research Article

AVOIDING AN EXCESSIVE DAMAGE OF USER CONTENTS IN INTERNAL OUTAGE USING GIS

Poorvadevi R*

CSE Department, SCSVMV University, Kanchipuram

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ABSTRACT

More development systems, GIS is playing a vital role for the distinct user level applications. Various computer based tools are used to iterate the process of automating the digitalized spatial data images. In heterogeneous environment, the application specific and functional oriented operations will be emphasizing the location features to visualize the spatial patterns. GIS and coastal management applications are enforcing the visual image contents in the different user platform. However, GIS provides lots of advantages in the client end location but still, the excessive contents damages are not resolved by any specific applications. The proposed system will bring the solution to solve the contents damage in various service access environments. The processes are needed to be iterated in the soft computing approach to evaluate the functional outcomes of massive data damage problem. The fuzzy based computations are effectively find the sources of content damage and rectify the issues in both client and server access locations.

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INTRODUCTION

A “geographic information system” (GIS) is a computer-based tool that allows you to create, manipulate, analyze, store and display information based on its location. GIS makes it possible to integrate different kinds of geographic information, such as digital maps, aerial photographs, satellite images and global positioning. GIS allows you to examine and analyze geographic information at different levels of detail or from different perspectives. Then, it enables you to customize the display of your maps and analyses for presentation to particular audiences. The benefits of taking a GIS approach to coastal management might include the following components.

The ability to model, tests, and compares alternative scenarios - before the proposed strategy is imposed on the real world.

The ability to handle much larger data bases and to integrate and synthesize data -- leading to a more holistic and coordinated management strategies; and (3) enhanced capacity for data exchange.

Using GIS, you can incorporate all of this information into a single system and execute common database operations.

Literature Survey

An author Asset akhmediya, Qiming Zeng,” Use of Sentinel-1 data for Earthquake damage Assessment in Cases of Amatrice and Sarpol-E Zahab“, this paper stated the mechanism of implementing the content damage in earthquake applications and variety of assessment established in the

service process to produce the service location where there will be a huge data damages repeatedly happened. [1]

Jianhua Wang ; Qiming Qin et.al, “A knowledge-based method for road damage detection using high-resolution remote sensing image”, the paper demonstrated the applications of knowledge implementation for finding the road damage system by applying the mechanism of high resolution remote sensing image which incorporated the function specific values of finding the road and traffic detection system. [2]

Long Wang ; Xiao-qing Wang et.al, “The design and realization of the spatial database for emergency earthquake damage assessment based on RS and GIS”, the paper specified the design and realization of the spatial database for emergency earthquake assessment using remote sensor (RS) and GIS principle to examine the damage prediction by using the various sensors. [3]

Proposed Work

While using the services by the client, it needs to examine the complex components internally of fault identification process that might specify the location and assessment of functional planning. Operational processes are migrated to the appropriate location by sensing the input sources form the various users to identifying the excessive data damage among the distinct datacenter. With the help of system data GPS will associate with the tabular content of database information that produces to find the prediction results of in which service process area, users are affected with the massive content damages. The following components were used to find the data damage in the various service specific environments.

*Corresponding author: **Poorvadevi R**

CSE Department, SCSVMV University, Kanchipuram

- Location history
- Any entry of intruder's
- Spatial pattern format
- Coastal management process

Above said functional components were iterated to implement the functional process indication of iterating the location and service access from the various environments. GIS can also be used to generate buffers around lines or designated areas.

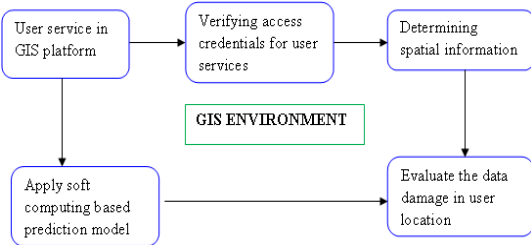


Fig 1 Illustration of Proposed system Framework

An above figure 1 depicts the functional operations of system architecture of finding the excessive data damages in service platform. GIS application will perform the decision making process to evaluate incremental decisions. With the available resources client records are maintained properly and service are optimized by reducing the occurrences of massive data damages.

Importance of Soft Computing Approaches in GIS

Soft computing is the process to find the certainty and uncertainty elements to make the perfect decisions for critical applications in any service specific environment. All the processes are needed to be segmented with its fuzzy control in order to optimize the results and verify the predicted outcomes for user application in a right direction or not. Datasets are implemented with the desired membership functions to obtain the effective quality outcomes to process the operational view of service usages in the various client applications. Fuzzy will evaluate the process oriented function to specify the correct decision in the machine acceptable coded values.

Implementation Work

Various survey results are analyzed to avoid or reduce the occurrences of data damage problem in spatial pattern modes. The following methods are optimized in the service location.

1. GIS Errors
2. Accuracy finder
3. Precision checking process
4. Data quality
5. Positional and logical accuracy

Table 1 Spatial Dataset Parameters

Web Coverage Service (WCS)	Web Map Service (WMS)	Web Feature Service (WFS)
Boundary region	User application navigation	Data quality
Service access location	Client objects ID	Service provisioning ID
Mapping data sources	Precision mapping	Greater pixel volume
Spatial points	Service control points	High precision data

An above table signifies the process of functional objective values of optimizing the user's data. In GIS process, errors of input ranges, accuracy and precision has been determined in the dataset contents and map the values with the existing datasets. The following formula used to perform the proposed

work by applying various parametric functions which is listed below:

Accuracy Finding for Content Loss: control point values + degree of spatial data mapping + errors rate in data

Precision Calculation: measurement values of GIS database+ high resolution quality data

Inaccuracy and Imprecision: Removing the repeated data for the spatial history + potential risks on the GIS location

All the service specific applications are virtualized in the service access platforms and data features are to be finding from many location sources and also establishing the control points in the various applications.

ITERATED RESULTS

During the service evaluation processes all the access level components are processed in the generic environment. It provides the services to the user to free from the massive data outage. All the datasets values are iterated in the accuracy, precision parameter. The following table shows the result implemented values in GIS process.

Table 2 Optimized Efficiency of Data Damage in GIS Process

GIS location Finder	Verifying spatial data Status	User service access information	Optimized Efficiency (%)
IP matched	Verified	Evaluated with access constraints	80.4
Data segmented	Verified	User service ID	93.29
Accuracy evaluated	Verified	Provisioning service access	94.75
Access point verified	Verified	Modified segment of damage location	98.53

An above table 2 process the operational elements of function oriented components and parametric values to build the data damage free system in GIS tracking location. The following figure shows the optimal solution for proposed work.

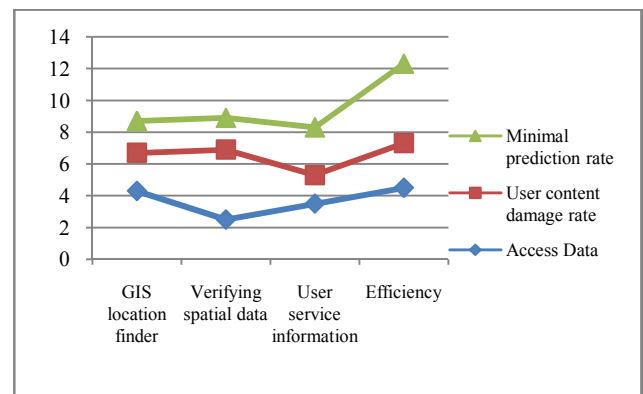


Fig 2 Resultant Graph for User Service Access

The generic processes are evaluated under the strong the computational process to examine the implication parameters of service outcome to establish the access constraints in the GIS navigation control.

CONCLUSION

In GIS technology all the processes are examined based on the different control segments to access the data. All the process is well computed to specify the rate and the occurrences of excessive data damage. For the proposed work results, the rate of data damage has been reduced and user needs to safeguard their data by keeping strong access policies.

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