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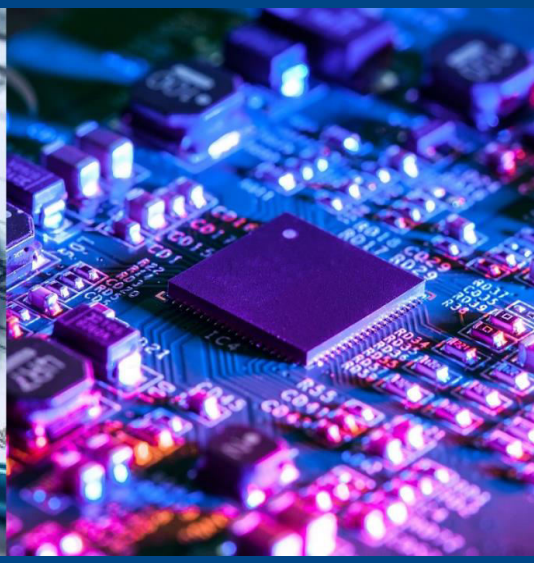

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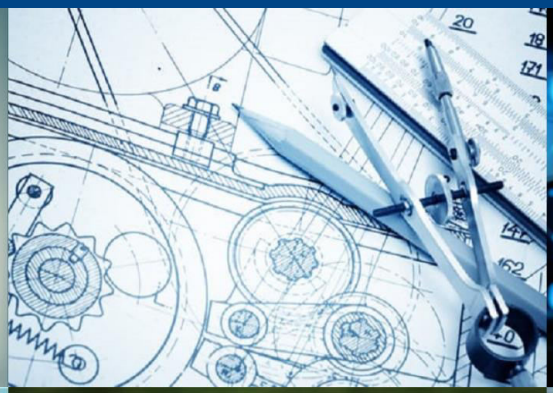

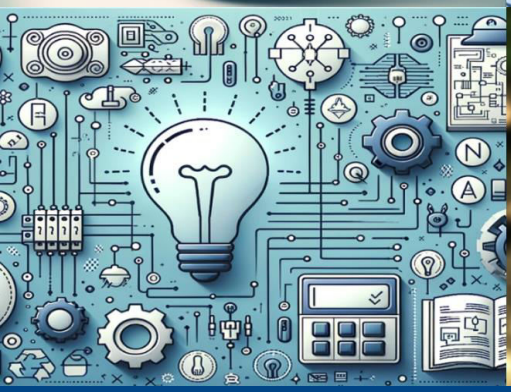

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Fraud Health Insurances – Impact on Clinical Concepts

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ABSTRACT: Health insurance fraud is a pervasive issue that significantly affects healthcare systems worldwide. Fraudulent activities, including false claims, billing for unprovided services, and identity theft, not only lead to financial losses but also have profound implications on clinical concepts. This paper explores how fraud in health insurance distorts medical decision-making, affects patient data integrity, and undermines evidence-based care. Fraudulent claims can lead to the misclassification of diseases, unnecessary medical procedures, and inflated healthcare costs, ultimately influencing diagnostic patterns and treatment approaches. Furthermore, compromised medical records due to fraud may impact clinical research, policy-making, and patient safety. Understanding the intersection between fraudulent insurance activities and clinical concepts is crucial for developing strategies to enhance data integrity, ensure ethical medical practices, and protect healthcare resources. This study highlights the need for robust fraud detection systems and regulatory interventions to mitigate these impacts and preserve the credibility of clinical decision-making. The proliferation of fraudulent health insurance schemes has far-reaching consequences for clinical concepts, compromising the integrity of healthcare delivery.

I.INTRODUCTION

As the process of producing official health statistics psychological instability is leading to various lifestyle diseases is slow, researchers have explored using Web search data as a proxy for lifestyle disease surveillance. Existing studies, however, are prone to at least one of the following issues: ad-hoc keyword selection, overfitting, insufficient predictive evaluation, lack of generalization, and failure to compare against trivial baselines. The aims of this study were to (1) employ a corrective approach improving previous methods; (2) study the key limitations in using Google Trends for Psychological Stress leading to lifestyle disease surveillance; and (3) test the generalizability of our methodology to other countries beyond the United States.

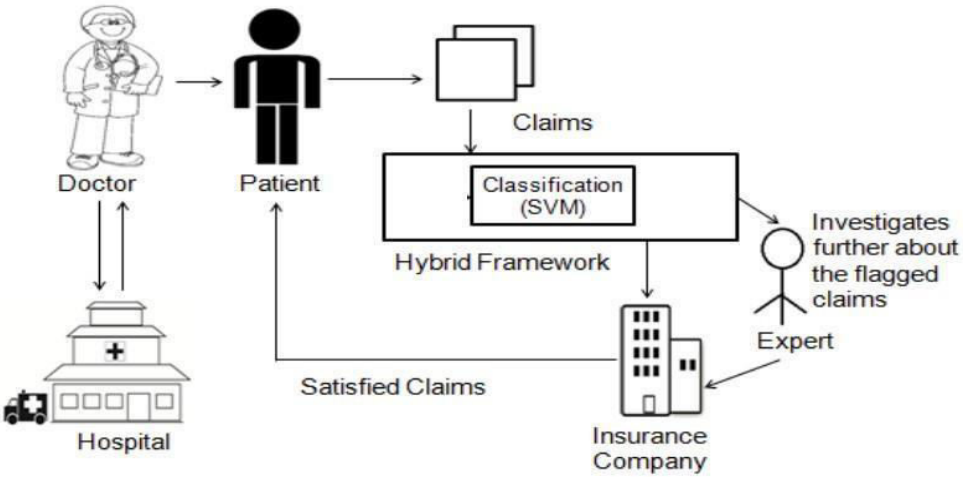

Figure 1: System Architecture

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II.LITERATURE REVIEW

1 LITERATURE SURVEY "Machine Learning based Approach to Financial Fraud Detection Process in Mobile Payment System" - Dahi Choi and Kyung Ho Lee, IT Convergence Practice (INPRA), volume: 5, number: 4 (December 2017),
pp. 12-24.
Mobile payment fraud is the unauthorized use of mobile transaction through identity theft or credit card stealing to fraudulently obtain money. Mobile payment fraud is the fast-growing issue through the emergence of smartphone and online transition services. In the real world, highly accurate process in mobile payment fraud detection is needed since financial fraud causes financial loss. Therefore, our approach proposed the overall process of detecting mobile payment fraud based on machine learning, supervised and unsupervised method to detect fraud and process large amounts of financial data. Moreover, our approach performed sampling process and feature selection process for fast processing with large volumes of transaction data and to achieve high accuracy in mobile payment detection. F-measure and ROC curve are used to validate our proposed model.

"Management of Fraud: Case of an Indian Insurance Company" – Sunita Mall et all, Accounting and Finance Research 2018.

Frauds in insurance are typically where a fraudster tries to gain undue benefit from the insurance contract by ignorance or wilful manipulation. Using the claims data in motor insurance obtained from a Mumbai based insurance company for the time period of 2010-2016, this study focuses on studying the pattern exhibited by those claims which have been rejected and accepted as
well. The prime objective of the study is to identify the important or the significant triggers of fraud and predicting the fraudulent behavior of the customers using the identified triggers in an existing algorithm. This study makes use of statistical techniques like logistic regression & CHAID (Chi Square Automatic Interaction Detection) technique to identify the significant fraud triggers and to determine the probability of rejection & acceptance of each claim coming in future respectively. Data mining techniques like decision tree and confusion matrix are used on the important parameters to find all possible combinations of these significant variables and the bucket for each combination.
This study finds that variables like Seats/Tonnage, No Claim Bonus, Type of Vehicle, Gross Written Premium, Sum Insured, Discounts, State Similarity and Previous Insurance details are found to be significant at 1% level of significance. The variables like Branch Code and Risk Types are found to be significant at 5% level of signify cancer. The Gain chart depicts that our model is a fairly good model. This research would help the insurance company in settling the legitimate claims within less time and less cost and would also help in identifying the fraudulent claims.

III.METHODOLOGY OF PROPOSED SURVEY

The Software Development Life Cycle (SDLC) is a series of stages that provide a structured approach to the software development process. It encompasses understanding the business requirements, eliciting needs, converting concepts into functionalities and features, and ultimately delivering a product that meets business needs. A proficient software developer should possess adequate knowledge to select the appropriate SDLC model based on project context and business requirements.
Therefore, it is essential to select the right SDLC model tailored to the specific concerns and requirements of the project to ensure its success. To explore more about choosing the right SDLC model, you can follow this link for additional information. Furthermore, to delve deeper into software lifecycle testing and SDLC stages, follow the highlighted links here.
The exploration will cover various types of SDLC models, their benefits, disadvantages, and when to use them. SDLC models can be viewed as tools to enhance product delivery. Therefore, understanding each model, its advantages, disadvantages, and the appropriate usage is crucial to determine which one suits the project context.

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Types of Software developing life cycles (SDLC).

- **Waterfall Model**
- **V-Shaped Model**
- **Evolutionary Prototyping Model**
- **Spiral Method (SDM)**
- **Iterative and Incremental Method**
- **Agile development**

V-Shaped Model

The V-Model (Verification and Validation Model) is a structured Software Development Life Cycle (SDLC) approach that emphasizes early testing by integrating verification and validation at each stage of development. It follows a Vshaped structure, where the left side represents the verification phases (Requirement Analysis, System Design, High-Level Design, and Low-Level

Design), and the right side represents the validation phases (Unit Testing, Integration Testing, System The verification phase focuses on planning and designing the system, starting with Requirement Analysis, where business and functional requirements are defined. This is followed by

System Design, which outlines the system architecture, High-Level Design (HLD) that defines module interactions, and Low-Level Design (LLD) that details internal module logic. The validation phase begins after the coding phase and includes Unit Testing (validating individual modules), Integration Testing (ensuring module interaction), System Testing (checking overall functionality), and Acceptance Testing (verifying if the software meets user expectations).

IV.CONCLUSION AND FUTURE WORK

Stress Detection System is designed to predict stress in the employees by monitoring captured images of authenticated users which makes the system secure. The image capturing is done automatically when the authenticate user is logged in based on some time interval. The captured images are used to detect the stress of the user based on some standard conversion and image processing mechanisms. Then the system will analyze the stress levels by using Machine Learning algorithms which generates the results that are more efficient Feature enhancement.

Future work can focus on expanding the study by applying the developed models to different cities or regions, thus enhancing the generalizability of the findings. Additionally, integrating real-time data from various sources, such as surveillance systems and social media, could improve the predictive power of the models. The development of hybrid models combining LSTM with other advanced techniques, like reinforcement learning, could also be explored to further optimize crime hotspot prediction. Moreover, incorporating socio-economic and demographic data into the models may provide a deeper understanding of crime trends, leading to more precise and effective crime prevention strategies.

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