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**Project Title-**“AI System that verifies user identity based on their online behaviour patterns adding an extra level of security”.

**ABSTRACT:**

In today's world where there are security concerns about our data and therefore there is an increased need for a system that can understand the behaviour of the user and act accordingly this can help us to prevent any data breaches that may occur and compromise our data. There are also issues regarding the traditional systems that are used by us for years are not as safe anymore as there are many ways these can be penetrated very easily even with a very small amount of knowledge about the person. And therefore there is an increased requirement for a different and more advanced security system that can learn about how the data breaches occur and how these can be prevented it can also help us find as quickly as possible when an attack is launched about the system. Therefore implementation of the AI in this field has become more and more necessary.

The topic we have chosen is related to the backend AI system which develops some recommendations on various online platforms. So the user identification becomes easier as their behavior patterns can be recognized after multiple interactions with the websites. There are many behavioral patterns of the users which include web interactions, keystrokes, mouse movements, and more. We have to design and implement data collection mechanisms that capture user behaviour in real time. And then we will normalize the collected data to ensure uniformity. Development of accurate AI models for behaviour analysis is at the core of the behaviour-based identity verification system. Training the models to accommodate different user behavior patterns. Then the last step would be adding an extra layer of security to prevent any sort of cyber threats. These behavioural patterns are very important to be studied to keep the websites secure from any safety issues related to the security. The behaviour studying will also help in identifying bots and preventing them from entering the websites which helps in increasing the safety of the website.

This is the a vast field that is growing each day as there is an increase in the amount of e-commerce websites and everything getting online there is an increased requirement for the protection of these websites from the attackers. And using AI to understand the users behaviour and understanding how they behave. This can help in securing the websites accordingly and use AI to prevent any security issues.