Chapter 10
Preserving Privacy of Social Media Data Using Artificial Intelligence Techniques

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ABSTRACT

Social media has a huge volume and variety of big data, which has enabled machine learning (ML) procedures and artificial intelligence (AI) frameworks. A few types of research have featured the dangers of revealing large amounts of information at various stages. The main aim is to connect the exploration and normalisation edge to build the consistency and proficiency of AI framework advancements ensuring user loyalty and moving towards a serious level of reliability. User security insight and the standards of its administrative assurance decide how the tech field works. It also introduces ways to deal with AI while demonstrating distinctions that are a result of comprehension of security, increasing user data privacy concerns and guidelines identified with information protection. The effect of AI systems on the relationship between clients and organisations has been stressed and examined concerning guidelines and client impression of security. With the rise of big data and AI, this issue of privacy of data has become significantly important.

INTRODUCTION

Social media and Big Data have changed our reality through the interconnection of the internet and real space. Map makers would now be able to follow, screen, and guide the spread of social developments, illness flare-ups, nature perils, and mainstream occasions by carefully gathering web-based media and Big Data with locational substance, for example, worldwide situating framework labels and client area profiles. The unique attributes of web-based media and Big Data give incredible examination freedom to map makers to plan and break down human practices, correspondences, and developments. There arise various difficulties and complexities in resolving affairs of cartographic examination concerning examining the connection between online media substance and Big Data through a spatiotemporal lens (Dilmaghani et al., 2019). The most well-known use of predictive analytics is recommendation systems, which are frequently utilised by eCommerce sites such as Amazon and Etsy to recommend goods to clients based on their purchasing habits. Based on our interests, Facebook suggests friends, destinations to explore, and even film recommendations.

Nevertheless, disclosing user behaviour data could lead to inference attacks, such as gender identification as per the user's behaviour. We looked into a variety of confidentiality protection techniques that are currently being used to defend from data breaches. Each one of these methods seems to have its own set of advantages and disadvantages. This paper will also examine and address significant exploration difficulties which appear in the field, along with noteworthy freedoms usable by map makers to measure and imagine Big Data and online media.

Smart Information Systems

Smart Information systems are a prominent example of a combination of Artificial Intelligence and Big data. There are many to a great extent covering banters about the moral and social results of fake insight—that is, the utilisation of equipment, programming, and applications to perform examinations of big data and to copy human psychological abilities. These advancements have pushed progress in ICT as of late. We chose to utilise the term brilliant data frameworks as a shorthand for advances that include man-made brainpower, machine learning, and big data because these are generally pertinent for the comprehension of the social results of these advances (Mazurek & Małagocka, 2019). They are framed and created in an environment of what we call "enabling technologies". The social and moral significance of these innovations emerges from a more extensive socio-economic environment that one requires to comprehend why SIS merit has extensive reflection and oversight. In the political scenario, it outlines science, innovation and research and advancement as a method for tending to social difficulties like financial development, natural maintainability, segment advancements, security, and social consideration. The political way of talking is for the most part acknowledged and duplicated by organisations and exploration associations (Tom et al.,2020; Stahl & Wright, 2018). It lays the right foundation for positive assumptions for SIS, which, by and by, have dull shadows identifying with moral issues and concerns. Fig1 summarises the relationship between SIS and both technical key drivers AI and Big data.

Organisation of the Work

Section 2 discusses

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