
Guest editorial

Special issue (part 2) on computer-aided learning and analysis for COVID-19 disease

Mishra *et al.* (2021) implemented multiple CNN models to classify chest X-ray of affected patients by using their chest scans. According to three models, the ResNet-50 is advantageous because of its high service reliability.

Kaur *et al.* (2021) proposed the hybrid artificial bee colony and glowworm swarm optimization [hybrid artificial bee colony and glowworm swarm optimization (HABC-GSO)] algorithm to select the cluster heads. Previous research has considered fitness-based glowworm swarm with Fruitfly (FGF) algorithm, but existing research was limited to maximizing network lifetime and energy efficiency.

Garg and Soni (2021) investigated the effect of snow on the radio link performance of wireless sensor nodes in Indian Himalayan conditions and to propose empirical path loss models for radio wave propagation.

Pande *et al.* (2021) proposed a framework for the detection of attacks. Also, a comparison of machine learning and deep learning algorithms is provided.

Doewes *et al.* (2021) performed the analysis of COVID-19 with the help of blood samples. The blood samples used in the study consist of more than 100 features. So to process high dimensional data, feature reduction has been performed by using the genetic algorithm.

Ch *et al.* (2021a) examined the neural networks-based COVID diagnosis methods using chest CT scan images and secure transmission of CT images for health information systems. For screening patients infected with COVID-19, a new approach using convolutional neural networks is proposed, and its output is simulated.

Ch *et al.* (2021b) analyzed the CT scans, which can include hundreds of images, may cause delays in hospitals. The use of artificial intelligence (AI) in radiology could help COVID-19-positive cancer in this manner is the main purpose of the work.

Upadhyay *et al.* (2021) analyzed the work to identify the critical barriers in social isolation in India amid coronavirus infection disease (COVID) outbreak using the fuzzy-analytical hierarchical process (AHP) method.

Khan *et al.* (2021) developed an approach to measure the effect of application. The lack of sensing or alarming technology in India pushed researchers to develop a model using the Android app that basically detected the upcoming flood and other calamities.

Vanjari and Kolte (2021) proposed a method for simultaneous compression and sampling of a given signal. It is a novel method increasingly being used in many speech

processing applications. The paper aims to use compressive sensing algorithm for hearing aid applications to reduce surrounding noise.

Shekokar and Dour (2021) presented a three-layer long short-term memory network for the detection of epileptic seizures.

Dovhan *et al.* (2021) developed the counter intelligence strategy as a conceptual document in the field of state security of Ukraine, identifying current security threats to Ukraine, which global landscape has been significantly transformed since the adoption of the Law of Ukraine "On Counterintelligence", is substantiated. It is proved that the provisions of such strategy should determine the current and projected counterintelligence environment via a set of the following elements. The nature of real and potential threats in the process of implementing state foreign and domestic policy course determined by Ukraine. Sources of such threats (individual states and their intelligence agencies, terrorist organizations, transnational organized crime, etc.). Features of the identified encroachment objects of foreign intelligence agencies, terrorist and other criminal organizations, including transnational ones. Long time strategy treats like COVID-19 pandemic.

Sanil *et al.* (2021) introduced a new study published by the Accenture Institute for High Performance, "AI" might double yearly economic growth rates in several wealthy nations by 2035. With broad AI deployment, the yearly growth rate in the USA increased from 2.6% to 4.6%, resulting in an extra \$8.3tn. In the UK, AI may contribute \$814bn to the economy, raising the yearly growth rate from 2.5% to 3.9%. The authors are already in a business period when huge technological development is assisting us in addressing a variety of difficulties to achieve maximum development. AI technology has enormous developmental consequences. In addition, big data analytics is helping to make AI more enterprise ready. Future developments in "ML" cannot be understated. Machines will very certainly eventually be smarter than humans in practically every way.

Billewar *et al.* (2021) presented an approach to focus on three-dimensional (3D) E-Commerce technology that presents how virtual reality (VR) and augmented reality (AR) can help deal with limitations and improve E-Commerce operations. It is built as an internet-only tool, a person-centered shopping assistant created following user-centered design principles to be used on various computing platforms, including desktop and mobile devices. The paper shows how VR and AR can offer more precise product information in 3D E-Commerce environments. The virtual store experience is also enhanced by an AR assistant that helps the users by giving them all the required information in audio form or using its avatar.

Ajeesh and Rukmini (2021) showed that student cognition of AI and technological dependency is a complex and emergent system, and that, despite current literacy education scholarship stressing digital literacy as a social and critical praxis, technology is treated in a mostly functional, rather than a critical, manner in a standard university language classroom. The results of this study suggest that the disadvantages of a realistic approach to teaching digital composition can be avoided by creating other forms of educational materials that adhere to critical digital literacies

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sense, such as posthuman literary works and science fiction film.

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