AI, MACHINE LEARNING, BIG DATA CRITICAL IN FIGHT AGAINST COVID-19, EXPERTS EMPHASIZE AT TRENDS E-DISCUSION

The E-Discussion was part of a series of events organized by TRENDS Research & Advisory to analyze the impact of Covid-19 on various spheres of the global economy

ABU DHABI, 07 May 2020 – Leading experts in the field of Artificial Intelligence (AI) discussed the potential of Machine Learning, Big Data, and other technologies at a ground-breaking online event organized by TRENDS Research & Advisory on Wednesday, May 6, 2020.

The E-Discussion – Using Artificial Intelligence to Tackle Epidemics: The Covid-19 Model – brought together leading experts from around the world who examined the prospects of using AI in research and treatment by helping identify vaccines, developing Machine Learning, and assisting diagnostics through the use of bots and decision-tree models. The E-Discussion was live-streamed on TRENDS YouTube channel.

Dr. Munier Nazzal, Professor of Surgery at the University of Toledo, Ohio, USA, noted that specialist AI centers in the US and Canada were among the first to predict the virulence and spread of Covid-19.

Commenting on the potential for the development of a vaccine to combat the virus, Dr. Nazzal noted: “AI can help with vaccine development by examining the virus’s components. This can aid specialists by speeding up the research processes enabling them to gain a basic understanding and develop treatments that can be subject to pre-clinical trials.”

Dr. Nazzal mentioned that The Lancet journal has published research suggesting that a combination of anti-viral and anti-inflammatory treatment could be effective, and South Korean, Hong Kong, French, US, and UK companies are currently working along these lines.

Konrad Karcz, Professor of Medicine and Head of Minimally Invasive Surgery at the Ludwig Maximilian University Clinic in Germany, spoke about the potential for chatbots to measure body temperature and other medical indicators in individual patients. According to him, information from AI screening could help identify ailments more quickly in airports, railway stations, public administration buildings, and factories.

“In Germany, large-scale data collection CT-based on deep learning has already yielded promising results. The work that has been undertaken so far indicates that AI and Machine Learning could certainly help us with the Covid-19 outbreak. As new complex problems require modern solutions, advanced technology will help us to develop the means to deal with future pandemics,” Professor Karcz noted.

Dr. Sapan S. Desai, Chief Executive Officer of the Surgisphere Corporation in the USA, explained that his company offered a real-time global research network that worked with over 1,200 healthcare partners to improve the quality of clinical research and improve the health of patients
The transformative potential of AI was illustrated by the company’s collection of data on 86,000 Covid-19 which was used to model outcomes that suggested healthcare resources would be severely strained,” he said.

Dr. Desai explained that by developing effective applications at a reasonable cost, Surgisphere is demonstrating that they are here for physicians and societies. "For Covid-19, we are looking to drive an effective data-based approach that can offer real care and treatment solutions for the benefit of people everywhere,” he said.

Dr. Eng. Bartłomiej Stanczyk, Robotics Engineer with ACCREA Engineering in Germany, explained that robots have a vast range of healthcare-related uses, such as disinfection of inaccessible areas in hospitals. He said that robots could also be used in close proximity to humans by installing a sense of touch based on force sensors.

Dr. Stanczyk noted that robots could help doctors keep a safe distance from the patient by using probes and other remote medical equipment. “We aim to build a completely autonomous diagnostician through robotics, thus enabling the transfer of the skill from the human doctor on the machine carrying out the treatment,” he said.

Dr. Stanczyk also said that the interface between the doctor and patient means the robot can carry out all of the diagnostic and treatment processes.

The E-Discussion was live-streamed on TRENDS YouTube channel: https://www.youtube.com/user/TrendsRA

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TRENDS Research & Advisory strives to present an insightful and informed view of global issues and challenges from a strategic perspective. Established in 2014 as an independent research center, TRENDS conducts specialized studies in the fields of international relations and political, economic, and social sciences. It undertakes rigorous analyses of current issues and international and regional developments, especially in the Middle East and North Africa.

The Center analyses opportunities and challenges at various levels of the geopolitical spectrum. It evaluates scenarios and prospects to find scientific and objective answers and seeks to influence the decision-making process. TRENDS Research & Advisory aims to champion national and regional causes and build a strong network with research centers, organizations, and institutions around the world. It also seeks to benefit from the expertise of international research and academic institutions.