



Faster diagnosis thanks to technology: Artificial Intelligence and Machine Learning can offer real help against Covid-19.

A team of experts is at work to create screening algorithms that support the health system.

Milan, 2020 March 16th – With the hashtag **#defeatcovid19**, Neosperience SpA (ISIN IT0005351496), launches the initiative and community **defeatcovid19.org** to onboard all organizations and experts in artificial intelligence. The goal is to identify technological answers that support healthcare departments and doctors in such a difficult time. To this purpose, Neosperience has already made available its platform and its team of data scientists to organizations and bodies that fight against Coronavirus, joined by the Milan Polytechnic, first partner of the initiative.

“We are gathering a team of artificial intelligence experts from all over the world - explained **Dario Melpignano, President of Neosperience**. We have taken the first step by making available our Neosperience Cloud platform, Core Edition, offered free of charge to all public and private and non-profit research institutions, active in the health ecosystem, who will request it for the purposes of developing novel Covid-19 screening methods.

Giuseppe Andreoni, the coordinator of the TeDH laboratory (Technology and Design for Health) of the **Milan Polytechnic** and scientific coordinator of the Nestore project, funded by the European research program Horizon 2020, which already sees Neosperience engaged together with 14 European public and private research organizations, is also convinced of the value of the initiative. “Together with Neosperience, we have created a working group that can develop screening algorithms with which to assist healthcare personnel. The team’s goal is to immediately welcome the contributions of the most expert organizations and data scientists broadly and inclusively, enhancing the efforts of each towards the common good.”

A challenge that brings together technical skills and ideal motivations, as the President of Neosperience reemphasizes. “In recent weeks, we have dedicated ourselves to understanding how to be more useful to our community in the difficult situation we are experiencing. One of the primary needs is to have diagnostic tools available that are quick and easy to integrate into the screening processes. Artificial intelligence and machine learning can provide a contribution in early diagnosis to health systems around the world: to organize operations, plan therapies and improve efficiency in such a critical moment. “

The technologies that Neosperience makes available include neural networks specialized in



identifying specific patterns within images and data correlation models, which can be used to support screening and, subsequently, to make the evaluation of therapies more robust in relation to the data collected, thus improving the estimation of the prognosis. Data collected anonymously in compliance with privacy legislation.

Dott. Alberto Barosi, Head of Non-Invasive Cardiovascular Diagnostics at Luigi Sacco Hospital of Milan, an expert in the field of diagnostic ultrasound, contributed to the realization of the project. The initiative involves a pool of Covid Hospitals in the provinces of Milan, Bergamo, and Brescia. Neosperience, together with the Polytechnic of Milan and the other partners who are joining, will promote the sharing, without profit, of the results achieved, which will remain the property of the scientific world. The data and models, together with the developed methodologies, will both be made public on open-source tools such as Github and made available to Italian and foreign research groups that request them, thus enhancing the tools to support diagnosis and treatment.

The data scientists who want to deepen and join the project can visit the website: <http://www.defeatcovid19.org/>.