RobotDreams

RobotDreams

ROBOTDREAMS® GMBH IS DEVELOPING AN AI-BASED SOFTWARE FOR THE DIAGNOSIS OF CARDIOVASCULAR DISEASES USING BLOOD TESTS

When astronauts leave the earth orbit the risk of dying from cardiovascular disease increases by four to five times. According to studies, there is a significantly increased risk of heart disease such as heart attacks under radiation exposure.This is according to a study published today in Scientific Reports that examined about 100 astronauts, including seven Apollo astronauts. Cardiovascular diseases are the number one cause of death in the EU with around two million deaths and cause costs of around 196 billion euros per year. Approximately 9.8 million people visit emergency department in the EU every year with acute chest pain that is one of the most common reasons for a visit to the ED. Patients presenting to the ED with chest pain present a diagnostic and logistical challenge, as most symptoms are due to non-cardiac and often benign conditions that do not require emergency treatment or hospital admission. Especially in the crowded emergency room, the assessment of patients admitted with acute chest pain is time-consuming, while a significant proportion of these patients do not actually suffer from acute coronary syndrome (ACS).

As a result, up to 13.5% of patients having unspecified chest pain are hospitalized unnecessarily and up to 2% of myocardial infarctions are missed discharging from the ED, which is associated with a twofold increase in 30-day morbidity and mortality. At the same time, clinical blood analysis is one of the most accessible diagnostic methods in practical medicine, since it reflects systemic pathological processes in the human body based on a quantitative assessment of cell composition and blood morphology. Modern automatic hematological analyzers are able to characterize thousands of parameters of blood cells within a minute. Due to the large amount of information obtained about the patient's blood count, doctors are mostly unable to fully interpret it in relation to the clinical situation.

RobotDreams® GmbH offers a very simple and inexpensive solution using artificial intelligence (AI). AI-based software will analyze the white blood cells measurements provided by hematology analyzers in a few seconds during an initial routine examination (first blood sample) and predict the ACS very accurately.

USP

RobotDreams® GmbH equires only the first blood sample to provide ACS diagnosis.

Target Market

The end customers of RobotDreams® GmbH are medical laboratories and space stations where the hematological analyzers are located.

Space Connection

In preparation for long-term space flights, the spacecraft must be equipped with diagnostic solutions that enable rapid and accurate diagnosis of diseases that occur under the influence of weightlessness, partial gravity, planetary dust and space radiation.

TEAM ROBOTDREAMS

Contact: Ulrich Weigelt (weigelt@robotdreams.co)
Website: https://robotdreams.co/