

Singapore launches new AI driven research laboratory in cardiac imaging

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First AI-driven research laboratory for multi-modal and multi-disease cardiac imaging established by a healthcare provider in Singapore and South East Asia



National Heart Centre Singapore has announced the establishment of the Cardiovascular Systems Imaging and Artificial Intelligence (CVS.AI) research laboratory. Studying various aspects of heart disease using different imaging methods, it is the first of its kind AI-driven research laboratory to be established in Singapore and South East Asia.

NHCS sees over 120,000 outpatient visits annually and performed nearly 17,000 cardiovascular scans in 2021. These cardiac scans assess the structure and function of the heart, and are used to detect new disease, monitor progression and help guide treatments for heart disease.

Recognising the value of the vast information collected and available in NHCS from the cardiac imaging it has done, NHCS set up the CVS.AI research laboratory to leverage the power of AI to harness these information so as to enhance the prediction and detection of cardiovascular disease. The objectives of setting up the CVS.AI research laboratory are: (1) to provide AI techniques in capturing and interpreting cardiac images to detect and predict cardiovascular disease, (2) to conduct in-depth assessments of cardiovascular disease amongst at-risk populations in Singapore, and (3) to enable the discovery new knowledge of complex patterns of cardiovascular disease.

The CVS.AI research laboratory will drive initiatives to improve the precision and efficiency in predicting and identifying the world's largest killer - cardiovascular disease; such as coronary artery disease, congenital heart disease and heart failure. The various types of cardiac imaging modalities used include CT, MRI and nuclear imaging.