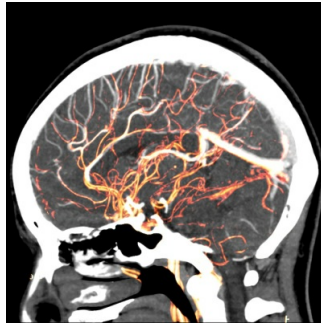## Flagging Aneurysms with AI

Diagnosis of brain aneurysm, a life-threatening condition, presents a challenge to clinicians as this task requires a high-level of expertise. Early detection however is important in order to prevent the worst outcomes. The good news is that artificial intelligence (AI) may soon help in diagnosing brain aneurysm before symptoms develop.

An international collaboration, involving Japanese AI specialists, a U.S. imaging solutions company and Australian clinicians, aims to develop an effective diagnostic method with the use of AI algorithms. The development of this new AI diagnostic tool for brain aneurysms is currently being undertaken by these four organisations: Fujitsu Australia, GE Healthcare, Macquarie University, and Macquarie Medical Imaging. This joint project has received a $2.1 million grant from the Cooperative Research Centres Programme, which provides matched funding of up to $3 million for industry-led collaborations.

"By creating an AI assistant to automatically flag potential aneurysms and allow for accurate follow-up, we can make a huge difference to patient care," according to Professor John Magnussen, diagnostic and interventional radiologist at Macquarie Medical Imaging.

Under this collaboration, Fujitsu Australia, one of Australia's leading IT companies, will apply AI techniques to patient images generated by GE's Revolution CT scanner. AI trained algorithms will then identify "patterns" or abnormalities associated with aneurysms.

AI has the potential to solve difficult medical problems such as early diagnosis, says Mike Foster, Chief Executive Officer of Fujitsu Australia and New Zealand, adding that the tech company is happy to be part of this collaboration that "leverages the strengths of each of our partners, as well as Fujitsu's experience in AI."

Lending clinical expertise for the project are Macquarie University and Macquarie Medical Imaging. Initially, the project will focus on refining the technology to create a commercially viable diagnostic technique. Project members hope the technique can then be used by radiology practices in Australia and worldwide.

This "co-creation" initiative is an excellent example of health services collaborating with industry, according to Professor Patrick McNeil, Deputy Vice Chancellor for Medicine and Health at Macquarie University.

"Macquarie University – with its own hospital and clinical expertise – is well placed to actively contribute to the development of applied medical innovations," Prof. McNeil points out. "We welcome the opportunity to work with leading information technology, healthcare and diagnostics companies, such as Fujitsu, GE and Macquarie Medical imaging."

Source: Mirage News
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