

New lab to use AI in tackling national challenges

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Singapore Management University (SMU) and the Agency for Science, Technology and Research (A*Star) have launched a laboratory that will apply artificial intelligence (AI) technology to tackle high-priority national challenges facing Singapore, such as the ageing population and polarisation.

The lab will develop tools and solutions tailored to the local context. One example is AI-powered systems that can monitor the well-being of senior citizens and alert caregivers in the event of anomalies.

The lab will also conduct research that integrates SMU's humanities and social sciences expertise and A*Star's science, technology, engineering and mathematics (Stem) expertise.

Speaking at the launch on Tuesday at SMU's Yong Pung How School of Law, SMU provost Timothy Clark said the new lab will focus on two main areas of research: computational social sciences and human-AI synergy.

Research in the first area will involve using AI and computational tools to study social issues such as adaptability, resilience and cohesion.

Professor Clark said computational tools can generate insights over large volumes of data, such as digital content gathered online, but research psychology and sociology will be needed to understand the ways people generate and consume this content.

Understanding this will be vital to designing ways to promote societal resilience and cohesion, and to combat divisiveness and falsehoods, he added.

"Our faculty members participating in the joint lab are experts in social media analysis, network analysis, natural language processing, machine learning and AI, which are crucial to conducting this area of research," said Prof Clark.

"They also have extensive experience in computational social science research into diverse societal challenges, such as media bias, polarisation and fake news across many online platforms and regions."

The other research area – human-AI synergy – will focus on developing advanced AI that can better understand human intentions using situational context and nuanced cues in human behaviour.

The tools and insights developed by the lab are aimed not only at government agencies but also firms and other organisations, said Dr Lim Keng Hui, executive director of A*Star's Institute of High Performance Computing and co-director of the lab.

"Everybody has got different preferences depending on, let's say, where you're from or the nature of your work," he said.

"Using the AI, we'll be able to make sense of their concerns at a large scale, to inform policymakers in companies or non-profit organisations."

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