

S\$42m awarded to R&D to boost cybersecurity

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SINGAPORE – With cyberattacks on transport systems an increasing risk over the past decade, a team here intends to focus its research over the next few years on ways to protect the nation's public transport systems against such threats.

Due to increasing reliance on cyber-systems to run transport networks, hackers are able to use devices as simple as a mobile phone to seize control of an MRT control system, direct trains into a collision course or jam train doors and prevent them from opening during a fire, said Dr Zhou Jianying from the Agency for Science, Technology and Research

(A*STAR), one of the scientists leading the research.

This demonstrates a potential vulnerability in the system, "so that's why we were inspired to try to improve the security and reliability of our urban transportation system", said Dr Zhou, who heads the Infocomm Security Department at A*STAR's Institute for Infocomm Research.

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In 2008, a 14-year-old boy managed to hack into Poland's tram system with an infrared device he had built, causing four vehicles to derail and 12 people to get injured.

Yesterday, the National Research Foundation (NRF) announced the award of grants to seven research projects, including Dr Zhou's, totalling S\$42 million in funding under its first National Cybersecurity R&D grant call for proposals.

The projects were picked from over 20 proposals received from local institutes of higher learning and research institutes, covering topics such as mobile security.

From January, Dr Zhou's team of nine researchers, engineers and students will, for the next four years, work on creating models and security mechanisms to defend transport control systems against cyberattacks.

Announcing the NRF grants at the 12th National Security Seminar, Deputy Prime Minister Teo Chee Hean said: "These projects seek to strengthen the resilience of Singapore's cyber-infrastructure and help us stay ahead of cyberthreats."

By anticipating threats, incorporating security through design and working together with other countries and international organisations, Singapore can better prepare for terrorism and cyberthreats, he said.

The Singapore Management University's School of Information Systems was also one of those awarded a research grant yesterday. It will develop technology to strengthen the security of mobile computing, systems and applications.

Another grant recipient was an A*STAR team, which will study cyber-forensics.