

OPENING REMARKS BY DSTA CHIEF EXECUTIVE MR TAN PENG YAM AT THE AWARD CEREMONY OF THE INAUGURAL BRAINHACK, ON 14 JUNE 2019, AT SINGAPORE EXPO

Senior Minister of State for Defence Mr Heng Chee How, Permanent Secretary (Defence) Mr Chan Yeng Kit, Students and school representatives, Distinguished guests, Ladies and gentlemen.

Good afternoon, everyone.

A very warm welcome to the BrainHack award ceremony. We are honoured indeed to have Senior Minister of State for Defence – Mr Heng Chee How with us today. I hope all of you have learned much and found the experience here interesting and fun – whether you were racing to uncover vulnerabilities to fortify a Smart City; training AI to see as well as humans; or trying out a wide array of fascinating tech applications at the Tech Showcase.

Looking back, DSTA organised the first Cyber Defenders Discovery Camp in 2012. Back then, we only see a few reported cyberattacks in Singapore. Seven years on, things have changed drastically. A lot more cyberattacks have been reported. We read of hackers defacing webpages, infiltrating public and private organisations to steal personal data. We had anticipated that cyber threats would grow in scale and sophistication, so we have continued to organise the Cyber Camp year on year.

Over the past seven years, the Cyber Camp has trained over 2,600 students. Close to 100 participants have taken up scholarship, internship and career opportunities in defence. Nearly half of the pioneer batch of NSF Cyber Specialists recruited this year were past Cyber Camp participants. We are pleased with these outcomes, but we will continue to do more.

On Tuesday, our Defence Minister, Dr Ng Eng Hen, commissioned Hunter, the Army's latest armoured fighting vehicle. What is significant about the Hunter is that it is the first fully digitalised vehicle for the SAF. It will allow the Army to do many things such as integrating with robots and unmanned vehicles that are controlled by AI. Digitalisation will only grow exponentially. It also means that the demand for expertise in cybersecurity, data analytics and AI will grow at a rapid pace to make systems smarter and yet cyber safe. DSTA is actively exploiting these technologies – to enhance situational awareness, uncover patterns and anomalies, and make better and faster decisions. What we are doing in AI could potentially unlock a "multiplier" effect in cybersecurity and many areas.

Research in AI started in 1956, and was heavily funded by defence. Sixty years on, AI has progressed significantly. If you are carrying a smartphone, you are using AI. We realised that we have to reach out to students on AI, while continuing to build on the success of our Cyber Camp. This was how BrainHack was born and conceived – harnessing AI (the "brain") while defending against cyber threats ("the hack"). So I am very pleased to see many of you at BrainHack today.

This event seeks to highlight the vast possibilities of AI and cyber technologies. The Cyber Camp and the AI Camp are the key components of BrainHack. We want BrainHack to be the springboard to nurture the next generation of "tech warriors" for our defence and also to contribute to Singapore, beyond defence. Besides opening up more internships, DSTA will offer more scholarships to groom top talent in these fields.

BrainHack would not have been possible without the support from various schools, Amazon Web Services, NCS, and all the other tech partners. Thank you very much for your support.

And finally, I would also like to thank the organising team for making BrainHack a success.

Thank you.