14 June 2019

News Release

INSPIRING A YOUNG GENERATION IN AI AND CYBERSECURITY

Training artificial intelligence (AI) to recognise gestures for image classification, coding cyber defences to strengthen a Smart City, and exploring these emerging technologies first-hand through interactive exhibits – more than 1,500 students from 30 schools gleaned insights into AI and cybersecurity at the inaugural BrainHack organised by the Defence Science and Technology Agency (DSTA).

Following the success of its annual cybersecurity youth camp held since 2012, DSTA conceptualised BrainHack to introduce a new focus on AI technologies with the Today I Learned (TIL) camp, improved the Cyber Defenders Discovery Camp (CDDC) with a new format, and capped off students' learning experience with a Tech Showcase to ignite interest in a myriad of engineering and technology applications from 13 to 14 June 2019.

During the award ceremony on 14 June 2019, Senior Minister of State for Defence Mr Heng Chee How illustrated ways that defence engineers are exploring AI-enabled, cyber-secure systems to help overcome manpower challenges, as the world races to tap these emerging technologies.

He said: "DSTA, together with MINDEF, recognises that the potential that AI and cybersecurity provide and are committed to developing these capabilities further. Through events such as this BrainHack, we hope to inspire talented individuals to follow in the footsteps of our defence engineers, and use your talents excitingly and purposefully for the greater good of Singapore. We hope to fuel your passion for technology and to enable you to continue developing your skills. There is still much

untapped potential in the areas of cybersecurity and AI, with many exciting opportunities for those who venture."

The various BrainHack activities set knowledge and skills training against real-world context to provide a strong foundation for students to pursue these fields in the future. The centrepiece of CDDC 2019 was a model replica of a Smart City on which competition challenges were based on, to highlight the physical impact that cybersecurity can have on society. Participants were challenged to perform cybersecurity analyses of industrial systems that could be used to shut down power supply and plunge the model city into darkness.

Similarly, TIL 2019 was aligned with recent advancements in AI and deep learning, introducing the participants to computer vision concepts through the main competition challenge. Participants coded and refined their AI models to accurately recognise gestures and poses in images, which could have applications ranging from soldier health and fitness to detection of anomalous behaviour for camp security. DSTA conducted upskilling for students prior to the competition. To further enrich the students' experience and perspectives, talks by industry leaders in AI were also conducted.

"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," said DSTA's Chief Executive Mr Tan Peng Yam.

Mr Heng presented awards to competition winners at the award ceremony attended by students, principals, teachers and members of the Ministry of Defence and Defence Technology Community.

-END-

For media queries:

Contact:	Ms Khoo Yin Suen Corporate Communications DSTA
Email:	kyinsuen@dsta.gov.sg

About Defence Science and Technology Agency

The Defence Science and Technology Agency (DSTA), a statutory board under Singapore's Ministry of Defence, exploits science and technology, and provides technological and engineering support for Singapore's defence and security. It delivers leading-edge technological solutions to the Singapore Armed Forces (SAF) by tapping the best technologies and fostering an environment of innovation for defence applications. Its role spans the entire spectrum of capability planning, development, and sustainment of weapon systems throughout their life cycle to ensure that the SAF continue to be a formidable fighting force.

Visit www.dsta.gov.sg for more information.