

BRAIN+HACK

BEYOND THE EDGE



TECH SHOWCASE & TECH TALKS

Join us and get up close with a diverse range of exhibits, and learn how DSTA equips Singapore with cutting-edge defence tech.

All workshop and competition participants who successfully qualify for the physical finals will enjoy exclusive access to:

TECH SHOWCASE - Learn about defence tech through interactive experiences at various booths, and speak with DSTA engineers to discover how innovation is shaping the future of defence.

Lunch time **TECH TALKS** - Hear from industry leaders - including an astronaut - who will share more about their expertise and experiences.

OUR SHOWCASE



ABOVE & BEYOND: SKIES & SPACE

Explore how DSTA harnesses cutting-edge counter-drone and aerospace technologies through interactive demonstrations and live showcases.

Experience both drone attack and defence in a thrilling 2v2 contest, and see how DSTA develops capabilities to stay ahead of emerging drone threats.

Discover how satellite technologies support real-world applications and learn about space sustainability through an interactive web application that features conjunction alerts, space weather monitoring and more.



MACHINES AT THE EDGE: LAND & SEA

Uncover how DSTA develops and integrates autonomous technologies across land and maritime domains to enhance Singapore's defence capabilities.

Try your hand at exciting activities featuring commercial security and patrol robotics, including teleoperating a bipedal wheel robot and racing with an autonomous robot.

Understand how autonomous vessels navigate safely at sea through an engaging game that simulates collision avoidance based on target characteristics.



TRUTH & TRUST: DIGITAL DEFENCE

See firsthand how DSTA applies Artificial Intelligence (AI) and cybersecurity technologies to tackle emerging digital threats.

Step in with your friends to experience real-time AI-powered face-swapping and explore the possibilities and risks of deepfake.

Learn how to create strong passwords to protect your online identity, and be rewarded for it.

OUR SPEAKERS



MR MERVIN ANG

Manager / Librarian (Outreach), Children & Reading, National Library Board

10 June, 12.00pm - 12.30pm

Be SURE with Generative AI

From deepfake videos to realistic AI-generated images, misinformation is becoming harder to spot. In this session, discover how these tools are misused and learn practical steps through NLB's S.U.P.E. framework to identify and avoid online falsehoods.



DR MARTIN ANDREWS

Head of AI, Red Dragon AI Pte. Ltd.

10 June, 12.30pm - 1.00pm

Anyone Can Cook (AI Version)

Inspired by the famous Ratatouille catchphrase, "Anyone can cook", this talk explores how today's AI tools make it possible for anyone to build incredible things. Dr Andrews cuts through the hype to explain the latest AI developments and shows how you can use AI to gain "superpowers" in your future career.



MR VIKTOR POZGAY

Consulting Director, Unit 42, Palo Alto Networks

10 June, 1.00pm - 1.30pm

The Zero-Window Era: Enterprise Defence for the Age of Frontier AI

The latest frontier AI models are reshaping cybersecurity at an unprecedented pace. This talk explores how AI is accelerating the discovery of software vulnerabilities and what it means for organisations. Learn why traditional, human-speed security is no longer enough, and what it takes to stay ahead of emerging risks.



DR PANG LIANG TECK

Senior Vice President / General Manager, Advanced Security Products & Chief Product Officer, Cyber, ST Engineering

10 June, 1.30pm - 2.00pm

Beyond the Horizon: Building a Resilient Quantum-Safe Cryptographic Strategy

What happens when quantum computers crack today's encryption? This talk dives into the coming "Q Day" and the rising threat of attackers collecting encrypted data today to decrypt in the future. Discover how cutting-edge solutions like Post-Quantum Cryptography, Quantum Key Distribution and other techniques work together to protect sensitive information, and how organisations should proceed to be quantum safe.



MR SAMUEL LEE

Chief Technical Officer, HOPE Technik

11 June, 12.30pm - 1.00pm

The Hidden World of Robotics

Robots are often built to take on tasks that are dirty, dull or dangerous for humans. In this talk, explore how real-world robotic systems are designed to solve practical challenges, from sensing and mobility to automation and human interaction, and uncover what it truly takes to build machines for the real world.



DR KOICHI WAKATA

Astronaut & Chief Technology Officer - Asia Pacific, Axiom Space

11 June, 1.00pm - 2.15pm

Beyond Earth: The Future of Technology and R&D in Space

From Space Shuttle missions to commanding the International Space Station, veteran astronaut Dr Koichi Wakata has witnessed firsthand the evolution of human spaceflight. In this talk, he will chart past, present and future exploration in Low Earth Orbit (LEO) and beyond, and explain how new technologies and space-based research and development will shape life on and off Earth in the years ahead.

