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News Release

INTERNATIONAL SOLVERS BATTLE IT OUT AT DSTA-IWTSD DATA ENGINEERING PRIZE CHALLENGE

Singapore's Defence Science and Technology Agency (DSTA) and the U.S. Department of Defense's (DOD) Irregular Warfare Technical Support Directorate (IWTSD), in partnership with ST Engineering, organised the first International Data Engineering Prize Challenge. This reflects the continued collaboration between the U.S. and Singapore under the Combating Terrorism Research and Development bilateral partnership.

This week, the three top finalists were in Singapore to battle it out to emerge as the competition's final winner. This new challenge called for a novel data ingestion and curation solution for counter-terrorism intelligence analysis. It sought to inspire and engage the global community of technologists to develop solutions which employ smart machine learning and fuzzy matching logic, with the aim of reducing the time required by analysts to examine multiple data sources and process massive amounts of data to produce actionable intelligence. These solutions will be applied in the real world, by the multinational members operating at the Counter Terrorism Information Facility[1] (CTIF).

The first competition garnered more than 200 sign-ups globally. These participants, which ranged from small and medium companies, researchers and individual solvers, pitted their solutions against one another with datasets provided in Phase 1 of the

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[1] Officially inaugurated on 22 Sep 2022, the Counter Terrorism Information Facility (CTIF) is a multi-national, inter-agency facility that brings together partner nations to share intelligence and provide early warning against terrorism in the region.

competition (13 Dec 2022 – 12 Feb 2023). The top 3 entries[2] moved on to Phase 2 (22 Feb – 22 Mar 2023) to refine and test their solutions with even more challenging datasets. The competition culminated in a final in-person pitching session in Singapore to a panel of judges comprising MINDEF Chief Defence Scientist Mr Tan Peng Yam, DSTA's Deputy Chief Executive (Information) Ms Gayle Chan, Research and Development Program Director and U.S. DOD (Retired) Dr James Frank, as well as Director of Massachusetts Institute of Technology Computer Science & Artificial Intelligence Laboratory Professor Daniela Rus. Team representatives were also extended an invitation to the Singapore Defence Technology Summit 2023[3].

Ultimately, Black Cape and Black Swan clinched first place (joint award), while Mr Chris Abraham was awarded the third place.

Noting the high-quality solutions presented, Ms Chan said, "It was inspiring to see the interest from all our international participants, along with their creative solutions. Exemplifying the power of collaboration across borders and time zones, the organising team worked towards a common purpose, transcending international boundaries and languages to execute the Prize Challenge in less than 6 months. It also reflects DSTA's continued efforts to establish new partnerships and opportunities beyond the traditional pool of partners, so that we remain agile and innovative."

"The efficient process of open innovation allowed the team to select a demonstrated capability from a much wider pool than typical government solicitation pathways;" offered Adam Tarsi, International Program Manager for IWTSD, "providing solutions proven to be fit for purpose rather than the hope of a successful outcome following a research and development contract."

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[2] The top three entries are: Team Black Cape from the USA, Team Black Swan from Israel, and Chris Abraham from the USA.

[3] Hosted by DSTA, the Singapore Defence Technology Summit is a unique gathering of global tech leaders from government, industry, academia, and think tanks, to network, confer, and collaborate in the development of defence and security capabilities. Visit https://www.techsummit.sg for more details.

About Defence Science and Technology Agency

The Defence Science and Technology Agency (DSTA) is a top-notch technology organisation that drives innovation and delivers state-of-the-art capabilities to make the Singapore Armed Forces a formidable fighting force. Harnessing and exploiting science and technology, our engineers and IT professionals leverage multidisciplinary expertise to equip our soldiers with advanced systems to defend Singapore. DSTA also contributes its technological expertise to support national-level developments. To achieve our mission, DSTA excels in systems engineering, digitalised platforms, cyber, software development and more.

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

About the Irregular Warfare Technical Support Directorate

The Irregular Warfare Technical Support Directorate (IWTSD) provides a forum for interagency and international users to discuss mission requirements for Irregular Warfare, prioritise those requirements, fund and manage solutions, and deliver capabilities. The IWTSD accomplishes these objectives through rapid prototyping of novel solutions and field-tested before the traditional acquisition systems are fully engaged. This low-risk approach encourages interdepartmental and interagency collaboration, thereby reducing duplication, eliminating capability gaps, and stretching development dollars.