Mastercard and NTU Singapore collaborate on new cybersecurity training and research partnership

The Mastercard-NTU Joint Lab is a unique program that aims to expand the region’s cybersecurity ecosystem, while also strengthening Singapore’s position as a global cybersecurity leader.

Singapore – Dec 7, 2022 – Mastercard today announced an industry-leading partnership with Nanyang Technological University, Singapore (NTU Singapore) to strengthen and grow the cybersecurity ecosystem in the Asia Pacific region.

The Mastercard-NTU Joint Lab will tap into Mastercard’s cybersecurity expertise alongside NTU’s education infrastructure to train and reskill cybersecurity talent in the region. Mastercard and NTU will also collaborate to identify projects for scientific research and development around cybersecurity and digital trust.

The partnership objective is to develop a talent pipeline and industry expertise to build cybersecurity ecosystem capability and create job opportunities in the fast-growing sector. The partnership has scope to scale as needed, and is part of Mastercard’s broader objective of establishing its first Cybersecurity Centre of Excellence (COE) for the Asia Pacific region, based in Singapore.

“The Mastercard-NTU Joint Lab is a great example of how industry partnerships and the sharing of expertise is driving innovation in the cybersecurity and fintech space,” said Ari Sarker, President, Asia Pacific, Mastercard.

“Government support and facilitation has been a critical factor in Mastercard’s ability to deliver this initiative successfully. The Singapore Economic Development Board was instrumental in providing Mastercard strategic direction and economic context in the conceptualisation process, including discussions with NTU.”

Philbert Gomez, Vice President and Head, Digital Industry Singapore, Economic Development Board (EDB), said, “As digital technologies become more pervasive, strengthening our cybersecurity ecosystem will be even more critical. The Mastercard-NTU Joint Lab is a timely initiative that will advance cybersecurity research and train more cyber talent. EDB looks forward to the Lab furthering cybersecurity innovation in Singapore.

The Mastercard-NTU Joint Lab also adds to the national Research, Innovation and Enterprise (RIE) efforts, which lay the groundwork for Singapore’s science and technology efforts every five years.

Professor Lam Khin Yong, Senior Vice President (Research), NTU, said, “Cybersecurity and digital trust have become increasingly important as Singapore moves towards becoming a Smart Nation. NTU’s collaboration with Mastercard is thus timely to ensure that digital technologies and solutions can be made secure and trustworthy. NTU will bring our strong interdisciplinary
approaches in research to address some of the most pressing and complex challenges facing the fintech industry. The collaboration is also aligned with the national RIE2025 plan, under which developing trust capabilities is one of the strategies.”

Globally, cybercrime is estimated to cost the global economy in the region of US$5 trillion (close to 5% of world GDP\(^1\)) and businesses, large or small, need to be able to keep their customers safe, while continuing to offer frictionless services.

“As the world becomes increasingly connected through advances in emerging technologies like cloud and quantum computing, 5G and AI, it is critical we innovate to keep the digital ecosystem safe and secure. Leveraging the new Mastercard-NTU Joint Lab to help harness, grow and nurture best in class talent will help deliver a safe and trusted digital ecosystem, today and tomorrow,” said Ajay Bhalla, President, Cyber and Intelligence at Mastercard.

The Mastercard-NTU Joint Lab will focus on two key areas of cybersecurity development:

- **Skills Training**: The partnership will offer an advanced 12-week joint Mastercard-NTU cybersecurity curriculum, including hands-on training, developed by Mastercard and delivered by NTU. The course will be open to students and mid-career professionals, though the government’s SkillsFuture and Enterprise Learning Transformation programs administered by NTU.

- **Research**: Mastercard and NTU will collaborate to identify cybersecurity-related research and proof of concept projects. The centre will explore areas, including the impact of quantum computing on cybersecurity and the use of privacy-enhancing technologies.

Co-leading the joint lab from NTU is Associate Vice President (Strategy and Partnerships) Professor Lam Kwok Yan, who is also the Executive Director of the national Digital Trust Centre. The centre leads Singapore’s research and development efforts and grows local talent and businesses for “trust technologies”, which help augment systems across the digital trust principles of privacy, accountability, identity, integrity, fairness, safety, and compliance.

“As technology evolves, new risks will emerge. Therefore, it is important to invest in “trust technologies” such as privacy enhancing technologies that address data privacy concerns, so that trust can be built among companies and consumers. For example, fintech companies can exchange their data in a confidential manner to address financial risks while still protecting the privacy of their customer data”, said Professor Lam Kwok Yan.

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About NTU Singapore

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\(^1\) Two reports form the basis of this statistic: (a) [Navigating The Fraud Economy: Five Tactics To Fend Off Fraudsters](https://www.forbes.com); (b) [Fraud costs the global economy over US$5 trillion](https://www.croweGlobal.com)
A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Medicine, Humanities, Arts, & Social Sciences, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies, Earth Observatory of Singapore, and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Nanyang Environment & Water Research Institute (NEWRI) and Energy Research Institute @ NTU (ERI@N).

Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

Ranked amongst the world’s top universities, the University’s main campus is also frequently listed among the world’s most beautiful. Known for its sustainability, over 95% of its building projects are certified Green Mark Platinum. Apart from its main campus, NTU also has a medical campus in Novena, Singapore’s healthcare district.

For more information, visit www.ntu.edu.sg

About Mastercard (NYSE: MA), www.mastercard.com
Mastercard is a global technology company in the payments industry. Our mission is to connect and power an inclusive, digital economy that benefits everyone, everywhere by making transactions safe, simple, smart and accessible. Using secure data and networks, partnerships and passion, our innovations and solutions help individuals, financial institutions, governments and businesses realize their greatest potential. Our decency quotient, or DQ, drives our culture and everything we do inside and outside of our company. With connections across more than 210 countries and territories, we are building a sustainable world that unlocks priceless possibilities for all.

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