



## **JOINT NEWS RELEASE**

Singapore, 17 July 2024

### **Ant International and NTU Singapore collaborate on Privacy-Enhancing Technologies to strengthen digital economy growth in the region**

To strengthen digital economic growth in the Asia Pacific region, **Ant International** and **Nanyang Technological University, Singapore (NTU Singapore)** have announced a collaboration over the next five years to conduct breakthrough research to advance digital trust leveraging both Ant International's industry experience and NTU Singapore's research expertise on Privacy Enhancing Technologies (PETs).

**Senior Minister of State Tan Kiat How, Ministry of Digital Development and Information**, witnessed the signing of the Master Research Collaboration Agreement (MRCA) between **Ant International** and **NTU Singapore**, represented by **Mr Jerry Yin, Chief Technology Officer of Ant International** and **Professor Lam Khin Yong, Vice President (Industry) at NTU Singapore**. The signing was carried out on 16 July at the Personal Data Protection (PDP) Week in Singapore.

Under the MRCA, Ant International will collaborate with NTU Singapore's Digital Trust Centre to advance the development of PETs in Singapore and the region. These technologies aim to help businesses unlock greater value from their data and create more use cases. Additionally, the development of PETs for Artificial Intelligence (AI) will enhance digital trust and make AI more reliable. This will be achieved by minimising the risk of data leaks, allowing businesses to share data and gain valuable insights without disclosing confidential information.

Ant International will commit to contribute up to S\$20 million over the next five years to support research on PETs.

Under this MRCA, Ant International will contribute a total funding amount of S\$5 million for the five-year partnership until July 2029. In addition to providing research funding for the MRCA, Ant International also intends to contribute a further S\$15 million to strengthen Ant's research capacity and subject matter expertise, to enhance the

country's overall research and development and drive responsible innovation in Asia by leveraging PETs.

During the collaboration, which will be based in NTU Singapore, researchers will have access to real-life use cases from Ant International for their projects, which will focus on advancing industry tools and processes for machine learning and secure insights sharing between businesses. This will be achieved through the use of advanced privacy enhancing technologies such as zero-knowledge proofs<sup>1</sup> and federated learning<sup>2</sup>. As researchers deepen their expertise in PETs through their projects, the aim is also to develop a team of specialised talents.

Ant International and NTU will also study topics related to large language models<sup>3</sup> (LLMs) that preserve user privacy while training or querying LLMs. Both parties will present their findings at leading conferences focused on AI safety.

A joint research committee will also be established to oversee projects conducted under the agreement. **Dr. Duan Pu, Ant International's Head of Data Algorithm and Technology Department**, and **Professor Lam Kwok Yan, Executive Director of the Digital Trust Centre at NTU Singapore**, will serve as Co-Chairs of the committee.

The MRCA builds on an existing collaboration on privacy-preserving computing between NTU Singapore and Ant Group, which saw the development of a new state-of-the-art Private Set Intersection (PSI) protocol that allows businesses to carry out joint database analysis while maintaining the privacy of their respective data.

**Mr Tan Kiat How, Senior Minister of State, Ministry of Digital Development and Information**, said: "Robust data protection is important for Singapore's digital economy. The Ministry of Digital Development and Information has taken steps to strengthen our data ecosystem, including by encouraging the use of privacy-enhancing technologies (PETs). I am glad to see companies collaborating with our Institutes of Higher Learning to develop PETs and nurture data protection talent. Such partnerships help us advance the development and adoption of data protection tools in Singapore and the region."

**Mr Jerry Yin, Chief Technology Officer of Ant International**, said: "Ant International is pleased to expand our collaboration with NTU, through this longer-term partnership. As a global digital payment and financial technology provider, data privacy is a core part of our business as we aim to provide merchants with secure, reliable and

---

<sup>1</sup> Zero-knowledge proofs allow one party to prove to another that a statement is true without revealing any information beyond the validity of the statement itself.

<sup>2</sup> Federated learning is a machine learning technique that enables multiple organisations to collaborate on training an AI model without sharing their actual data.

<sup>3</sup> Large language models are models designed to protect sensitive information while processing training data or user queries, ensuring that personal or confidential data is not exposed.

seamless solutions. By leveraging NTU's academic expertise and Ant International's industry experience, we look forward to advancing the development of privacy-enhancing technologies with new innovations that address real business needs."

**Professor Lam Khin Yong, Vice President (Industry) of NTU Singapore**, said: "Through its Digital Trust Centre, NTU Singapore has built upon and fostered expertise and talent in Trust Technologies. The collaboration between NTU Singapore and Ant International, a leader in global digital payments and fintech, underscores NTU's commitment to translating research innovation in the area of Privacy Enhancing Technologies into practical applications. Together, both parties will aim to pioneer innovative solutions that strengthen digital trust and security, empowering businesses to responsibly leverage data for transformative outcomes."

Organised by Singapore's Personal Data Protection Commission (PDPC), PDP Week convenes regional regulators/policymakers, industry leaders and international think-tanks to connect and collaborate on data use and technologies, including privacy enhancing technologies (PETs). For more information on PDP Week, please visit <https://www.pdpc.gov.sg/pdpweek2024>.

\*\*\* END \*\*\*

**Media contact:**

Mr Joseph Gan  
Manager, Media Relations  
Corporate Communications Office  
Nanyang Technological University, Singapore  
Email: [joseph.gan@ntu.edu.sg](mailto:joseph.gan@ntu.edu.sg)

Ms Kahmun Leong  
Communications Manager  
Ant International  
Email: [kahmun.leong@antgroup.com](mailto:kahmun.leong@antgroup.com)

***About Nanyang Technological University, Singapore***

A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) has 35,000 undergraduate and postgraduate students in the Business, Computing & Data Science, Engineering, Humanities, Arts, & Social Sciences, Medicine, Science, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Earth Observatory of Singapore, Nanyang Environment & Water Research Institute 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, NTU has achieved 100% Green Mark Platinum certification for all its eligible building projects. 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](http://www.ntu.edu.sg)

### ***About Ant International***

Headquartered in Singapore, Ant International powers the future of global commerce with digital innovation for everyone and every business to thrive. In close collaboration with partners, we support merchants of all sizes worldwide to realise their growth aspirations through a comprehensive range of tech-driven digital payment and financial services solutions.