

## IBM and NUS collaborate to promote FinTech and blockchain training in Singapore

Both organizations are working to jointly develop and deliver a module on blockchain and distributed ledger technologies

SINGAPORE and ARMONK, N.Y., April 25, 2017 [PRNewswire/](#) -- The National University of Singapore (NUS) School of Computing and the IBM Center for Blockchain Innovation (ICBI), a part of IBM Research, are collaborating to jointly develop a module on financial technology, to better equip students with essential knowledge and skill sets in this area.

Blockchain is a fast growing area across the globe, with banking, healthcare and the government leading the way in terms of adoption. According to studies by IBM's Institute of Business Value, these three industries are investing heavily in blockchain and commercial solutions are expected to be in place in the next few years.

- [Leading the pack in blockchain banking: Trailblazers set the pace](#): Fifteen percent of banks and 14 percent of financial market institutions interviewed by IBM intend to implement full-scale, commercial blockchain solutions in 2017. 65 percent of banks are expecting to have blockchain solutions in production in the next three years.
- [Healthcare rallies for blockchains: Keeping patients at the center](#): Healthcare institutions are going all-in – investing heavily in blockchain pilots, with nine in ten respondents planning to invest by 2018 across all business areas IBM surveyed them about.
- [Building trust in government](#): Nine in ten government organizations surveyed plan to invest in blockchain for use in financial transaction management, asset management, contract management and regulatory compliance by 2018.

The Singapore government's strategic goal to become a Smart Financial Centre<sup>d</sup> has put focus on blockchain for Singapore. Through its Financial Sector Technology & Innovation (FSTI) scheme, the Monetary Authority of Singapore (MAS) has committed S\$225 million (US\$157 million) over a five-year period to provide support for the creation of a vibrant fintech ecosystem. Among the projects that have been backed by the scheme is a decentralized record-keeping system based on blockchain technology aimed at preventing duplicate invoicing in trade finance.

The new module on financial technology is expected to be introduced in January 2018, and will focus on blockchain and distributed ledger technologies. It seeks to equip students with an understanding of the fundamentals of the technology behind distributed ledgers, and its diverse use cases, from banking to digital currencies to supply chain management. NUS faculty members will co-develop the curriculum of the new module with IBM researchers at ICBI to enable students to learn about the latest developments in blockchain technology, and encourage them to contribute to developing the technology further. The module will be co-taught by NUS academic staff and ICBI staff who will use financial technology software such as Hyperledger Fabric, one of the five projects under the Hyperledger umbrella, to deliver the course content. Hyperledger Fabric was initially contributed by IBM. Such software will also be made available to NUS researchers for research purposes. Such software will also be made available to NUS researchers for research purposes.

Blockchain, or distributed ledger technology, is a distributed database of transactions shared across a network of trusted entities. Blockchain helps create greater accountability, transparency and potentially trust for all transactions and is currently being used in business applications across industries including banking and financial services, supply chain and logistics and retail.

"Our collaboration with ICBI marks yet another important milestone in our continuous efforts to bring industry relevant knowledge to our classrooms and at the same time inculcate technological responsibility in our students by spearheading the development of financial technology in Singapore, as the nation strives to become one of the world's key digital financial hubs. The new module forms part of the newly enhanced Information Systems degree programme in which a new specialization in

Financial Technology has been introduced. We are confident that our graduates will be well-prepared for the wide-ranging career opportunities in this fast-growing sector," said Associate Professor Hahn Jungpil, Head of the Department of Information Systems at NUS School of Computing.

"Blockchain is one of the most disruptive technologies in computing today, and it is impacting many industries including financial services, trade, healthcare and supply chain. This collaboration with the National University of Singapore School of Computing will help prepare a future workforce that is born on blockchain, ready to implement, improve and innovate: core skills required for Singapore to achieve its vision as a Smart Financial Centre and Smart Nation," said Robert Morris, Vice President Global Labs, IBM Research.

Under the collaboration, ICBI will provide technology support in the form of access via the IBM Cloud to the Hyperledger Fabric blockchain framework. IBM is an early contributor Hyperledger, a Linux Foundation project, which now contains more than 129 member organizations.

### **About National University of Singapore (NUS)**

A leading global university centred in Asia, the National University of Singapore (NUS) is Singapore's flagship university, which offers a global approach to education and research, with a focus on Asian perspectives and expertise.

NUS has 17 faculties and schools across three campuses. Its transformative education includes a broad-based curriculum underscored by multi-disciplinary courses and cross-faculty enrichment. Over 38,000 students from 100 countries enrich the community with their diverse social and cultural perspectives.

NUS takes an integrated and multi-disciplinary approach to research, working with partners from industry, government and academia, to address crucial and complex issues relevant to Asia and the world. Researchers in NUS' Schools and Faculties, 30 university-level research institutes and centres, and Research Centres of Excellence cover a wide range of themes including: energy, environmental and urban sustainability; treatment and prevention of diseases common among Asians; active ageing; advanced materials; risk management and resilience of financial systems. The University's latest research focus is to use data sciences, optimisation research and cyber-security to support Singapore's Smart Nation initiative.

For more information on NUS, please visit [www.nus.edu.sg](http://www.nus.edu.sg).

### **About IBM**

IBM is the leader in secure open-source blockchain solutions built for the enterprise. As an early member of the Linux Foundation's Hyperledger Project, IBM is dedicated to supporting the development of openly-governed blockchains. IBM has worked with more than 400 clients across financial services, supply chains, IoT, risk management, digital rights management and [healthcare](#) to implement blockchain applications delivered via the IBM Cloud. For more information about IBM Blockchain, visit <http://www.ibm.com/blockchain>.

### **Contact:**

Hannah Slocum

IBM Communications

[hslocum@us.ibm.com](mailto:hslocum@us.ibm.com)

+1 978 877 0105

<sup>1</sup> Monetary Authority of Singapore, Singapore Financial Centre, Smart Financial Centre:  
<http://www.mas.gov.sg/Singapore-Financial-Centre/Smart-Financial-Centre.aspx>

