

**Speech by Associate Professor Goh Yihan, Dean of SMU School of Law,
At the launch of the Centre for AI and Data Governance**

24 September 2018

Senior Minister of State, Ministry of Transport & Ministry of Communications and Information, Dr Janil Puthuchear

Professor Lily Kong, Provost, Singapore Management University

Mr Yeong Zee Kin, Deputy Commissioner, Personal Data Protection Commission

Professor Urs Gasser, Executive Director, Berkman Klein Centre for Internet and Society at Harvard University

Faculty, Staff, Students

Friends of SMU

Introduction

A very good evening to all.

Following the panel discussion, it now gives me great pleasure to welcome each of you to the official launch of the Centre for AI and Data Governance. I want to especially welcome the Senior Minister of State, who has not only agreed to grace this official opening, but also participated in a robust public panel on the governance of AI that took place earlier.

The Centre for AI and Data Governance will be based here at the SMU School of Law, but will pursue interdisciplinary research that will extend beyond the legal domain. The setting up of the new Centre has been made possible by a grant of \$4.5 million from the National Research Foundation (NRF) and the Infocomm Media Development Authority (IMDA) to the SMU School of Law in June 2018. We are grateful for the trust that has been placed in us, and we will do our utmost to deliver.

Even if we had not been awarded the grant, the establishment of such a Centre in Singapore could not be any timelier.

AI in Today's World

With increasingly powerful AI in the driver's seat, machines can sense, think and act. Google's autonomous cars have logged more than two million miles. Exploration rovers powered by AI traverse hostile terrains and go where humans cannot, moving dangerous objects and transmitting mission critical data. In some cases, AI medical diagnostics have started to outstrip their human counterparts and robotic surgery has demonstrated

significantly improved outcomes, assisting in 85% of certain surgeries in the US. Bestowed with human attributes, carebots can lift elderly patients out of bed, place them into wheelchairs, walk, feed, and keep them company. AI need not be embodied to act upon the world; powerful software bots trade more than 75% of all stocks and futures on the NYSE and NASDAQ at rates faster than humans are capable of monitoring. AI can be used to many ends: assembling furniture, grading college essays, diagnosing cancer, detecting lies, doing the laundry, painting, playing, gratifying, and killing.

The AI concept is not new. The dream of delegating human tasks to intelligent machines, of creating *automata* that do our bidding, was envisaged by Aristotle to replace Athenian slave morality. Isaac Asimov's vision of a flourishing human-robot society—where robots work alongside humans and are ethically hard-wired to always obey and never harm—is a firmly entrenched utopia. Today's AIs are increasingly autonomous, performing desired tasks in unstructured environments without continuous human oversight. Cloaked in human attributes, today's AIs co-exist with humans as co-workers, co-explorers, co-drivers, and co-inhabitants. And this is just the beginning of a new relationship between our human-centric societies and increasingly intelligent and autonomous machines.

Of course, every utopia invites an equal and opposite dystopia.

Stephen Hawking and Elon Musk have spoken of the dangers of AI. A critical error in an automated trading (flash crash), transport or military system could wreak havoc. There is also a substantial risk that powerful AIs designed to carry out tasks will be used for unintended purposes, resulting in unforeseen behaviour and potential danger. But drastic harm is only one possible effect of the deep dependences created in a AI-driven society. Inviting robots and AIs into our skies, cities, workplaces, homes and families could cause profound social and economic shifts. It will increase surveillance in places we consider private. It fundamentally challenges our liability and accountability systems when things go wrong. It alters the role of human workers in a variety of sectors, beyond expected job losses.

Given the potential promise and peril associated with the rapid acceleration of robotics, machine learning and the broader field of data science, Singapore should establish itself as a global thought leader in the relevant legal, ethical and regulation issues. These aspects will play a big role in determining how the technology is used, and the extent to which economic and societal potential are realized in positive ways.

The Centre

It is for these reasons that the Centre for AI and Data Governance aims to become an internationally respected thought leader in the global development of AI and data governance. In carrying out this vision, the Centre will do three things principally:

- First, working closely with industry and other academic partners, the *Centre* will generate deep expertise and sustainable domestic capacity in the fields of AI and data governance, creating knowledge and governance solutions for government, industry and civil society.

- Second, the *Centre* will develop pragmatic legal frameworks through cutting-edge legal and ethical research, which will thoughtfully enable AI as an economic driver and ensure its beneficial uses.
- Third, the *Centre*, through principal participation within the Singapore AI eco-system, will establish Singapore as a respected thought leader on the global stage, and an exporter of sound policy and good governance for AI and data use.

The first five years of *Centre* activities will be organized in accordance with the following three research Streams, together generating, in the first instance, an integrated 5-Year Research Programme for the Governance of AI and Data Use.

- **AI and Society:** This Stream of research will focus on our near and medium-term understanding of AI, seeking to determine the best regulatory structures for ensuring its beneficial use. It will focus on several pertinent social issues including: trust, privacy and data protection.
- **AI and Industry:** This Stream of research will inform the implementation of norms and values that ensure AI and data use are responsible, accountable and sustainable in key industries to Singapore. For strategic reasons, the *Centre* will study AI's impact on key industries in Singapore such as transportation and dispute resolution.
- **AI and Commercialization:** This Stream of research will address the challenges that arise in the commercialization of AI, with a focus on intellectual property, transnational commerce and trade, and the financial sector.

In carrying out the above research projects, the Centre will work with various public agencies and private organisations. The collaborations may include the co-organisation of research conferences and seminars, as well as the exchange of researchers. Today's event, co-organised with the Berkman Klein Centre for Internet and Society at Harvard University and the Digital Asia Hub, is a good example. Yet another example is that of the Centre working with the Centre for Commercial Law Studies at Queen Mary University of London to conduct a pilot study on trustworthy AI. The Centre also plans to organise topical seminars to update the legal and business community, and provide new thoughts to practitioners and decision-makers in the public and business sectors.

The careful integration of these three research Streams will be used to develop government- and industry-relevant strategies for the governance of AI and data use, thereby contributing to the development of Singapore's digital economy.

SMU at its Best

More broadly, the Centre epitomises the values that represent the SMU School of Law. As a young law school, our vision is that of a more interconnected world that is attained by the study and practice of law. Our aim is to bridge not only the reality – between, for example east and west, academia and practice, but also the metaphorical – building bridges across the past and the future, across disciplines. The Centre is positioned to do exactly that.

In closing, I want to say that if there is one thing the Centre has achieved already, it is that it brought out the best in SMU and beyond.

- Earlier this year, when we first decided to put in a bid for the grant, we were gratified by the number of faculty, not only within the School of Law, but across SMU, who readily lent their help when called upon. To all my faculty and colleagues across SMU who supported this Centre from its inception – and whom I hope will continue to support it – thank you so very much.
- And when we reached out to external institutions, in Singapore and overseas, both in industry and academia, for their support, we were struck by the immense offers to help us so readily. You can see the list of our external partners in the press release, but I want today to highlight the immense support we received from the Berkman Klein Centre for Internet and Society at Harvard University, as well as the Digital Asia Hub. I don't want to embarrass anyone, but I will always remember with gratitude how Professor Urs Gasser, whom I did not know beforehand, responded within 24 hours of my initial email with an electronically signed letter of support, and pledge to explore new avenues of collaboration. To Urs, and all our partners in industry and academia, thank you so very much.
- And last but finally not least, when we put into action the launch event for today, I am gratified that our staff here at the School of Law pulled together, on top of their usual workload since the Centre has not yet hired its first staff member, to make this launch a success. I am immensely grateful especially to Melissa and Junhao, as well as Angie, Anne, Brenda and Rehju, and Peiling at OCCM, and so many more, who pitched in to help.

Although I am an optimist at heart, all of this has actually made me even more optimistic and excited about the work that the Centre for AI and Data Governance can achieve. Beyond the research that will hopefully help create meaningful impact in industry, I am also excited about the partnerships that the Centre will build, between East and West, between academia and industry, and across borders and cultures.

Conclusion

Thank you one and all once again for taking the time to attend today's launch event. We look forward to fostering collaborations in this important space.

This leaves us with only one thing left to do – to officially open the Centre for AI and Data Governance.
