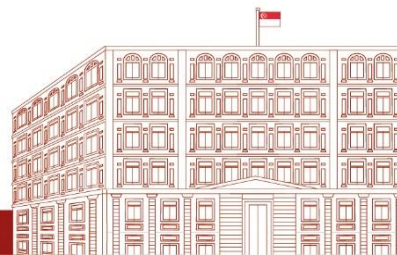




**Opening Remarks by Mrs Josephine Teo,
Minister for Communications and Information,
At SCS Tech3 Forum (15 Oct 2021)**

Dr Chong Yoke Sin, President of the Singapore Computer Society
Mr Piyush Gupta, CEO of DBS
Distinguished Guests
Ladies and Gentlemen

1. Good morning everyone. I am happy to join you at this annual Tech3 Forum.
2. This year's theme – *“Reset or Rebuild? Thriving Responsibly in the Post Pandemic World”* resonates a lot with me. There are at least three big questions we can ask as we think about the next bound of growth for our digital economy:
 - First - How can we harness the power of digital to **rebuild** our economy, to create new opportunities for our people?
 - Second - How do we wield this power **responsibly**, to build a sustainable digital future for everyone?
 - Third - How we might take this opportunity to **redefine and set** the values that shape our community, so that all of us have a stake in this digital future?
3. **There is no doubt that digitalisation will be an increasingly pervasive force in rebuilding our economy.** Digitalisation holds tremendous potential to transform our economy, our businesses, our enterprises, and to create new areas of opportunity. We are already seeing the results of our investments in digital technologies:
4. At our ports, Singapore has been experimenting with 5G – a game-changing technology that offers great bandwidth improvements as well as reduced latency. This allows us to raise our ambitions, with the Tuas Megaport expected to be fully automated to handle 1.5 times more containers than possible currently.
5. In healthcare, building on past efforts, we have SELENA+, an AI system that detects eye diseases with greater speed compared to a human. It has been deployed to all of our 20 polyclinics. The system was licensed to a local startup, EyRis, which has introduced SELENA+ to markets such as Indonesia, China, Brazil and the EU.
6. Critically, SELENA+ also catalysed the development of a medical imaging platform – a shared digital infrastructure that will enable the public healthcare clusters to seamlessly train and deploy AI models from different providers and across various imaging modalities. So these are some of the encouraging developments.
7. **But given the pervasiveness and power of digital technology, it has become an imperative to also think about how to harness it responsibly.** Responsibility can be considered in at least two ways – inclusion and safety.
8. Inclusion relates to how we bring each another along in this digital journey to maximise the digital dividend, and yet to minimise the digital divide. Earlier this year, the Government launched the Digital for Life Movement. It is not a programme, we decided that it has to be a movement because the digital inclusion agenda is of a scale that requires the people, private and public sectors to come together to drive things forward.



9. Safety relates to the responsible use of technologies. The very same technologies that benefit us can also be exploited to cause real harm to lives and livelihoods.

10. Last year, Singapore saw more than 16,000 cases of cybercrime, an over 70% increase from 2019¹. Ransomware cases reported to the Cyber Security Agency of Singapore also increased by over 150%. You could argue that they started from a lower base, but nonetheless, these are global trends that are also mirrored in Singapore, that we should pay attention to.

11. The ethical challenges of AI are also not trivial by any means. We have already seen real world instances of biases in AI algorithms that have resulted in problems of discrimination.

12. These are global, transborder problems and Singapore cannot deal with them alone. It is now more critical than ever to promote the responsible use of technologies and shore up our collective defence in cyberspace. As a result, we have been actively convening and participating in international discourse on the responsible use of technology amongst policymakers, thought leaders and industry experts.

13. Just last week, we facilitated conversations on digital and cyber security at the Singapore International Cyber Week. We spoke about emerging digital technologies and the opportunities and the threats that they bring. We talked about the need to update cybersecurity policies and to coordinate our capacity building efforts.

14. At the Asia Tech x AI conference in July, we hosted robust conversations on the value of AI governance to industry, and discussed how companies of different sizes can implement ethical AI. Such efforts contribute to a more sustainable, multilateral order for the digital domain that is still very much at the nascent stages of being built, and it is also more important that we participate in this conversation and help to shape what the future of the digital domain looks like internationally.

15. **It is equally important that we write the stories to envisage what the digital future means to us and the values that define us.** Here in Singapore, our pursuit of digital innovation is guided by values such as inclusion and progress.

16. Today, women make up 41% of our tech workforce, well above the global average of 28%. This is good, of course, but I do believe, as many of you as well, that there is so much more we can do to attract and retain female talent in tech-related careers.

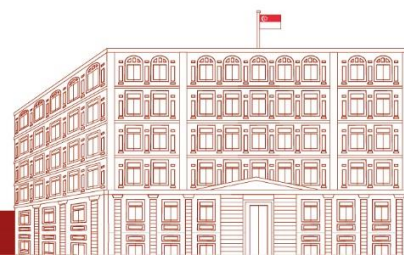
17. Last month, together with my fellow MPs and corporate partners, we pledged concrete actions to advance women's opportunities in the tech sector. Riding on that pledge, I am happy to unveil the Singapore 100 Women in Tech list for 2021 today.

18. The digital future I spoke about earlier is one of the many possibilities that Singapore can see for ourselves. And this year's list tells us how these possibilities are turning into reality, in an inclusive way, meaning getting the women involved as well.

19. As technology becomes more embedded in the transformation of industries across the board many of the stories in today's list bear testament to the multi-disciplinary backgrounds and experiences that our tech talent will increasingly need to have.

20. Given the transborder nature of cyber threats, I am heartened by stories of individuals like Ms Alina Tan. I met Alina ahead of the Singapore International Cyber Week. She is today, an Associate Principal and Enterprise Security Architect with Dyson. She is actually a leading expert in

¹ From CSA's annual report published on 8 July 2021, there were 16,117 cases of cybercrime in 2020, up from 9,349 in 2019.



all about autonomous vehicles, and how you secure them. She has carved out a niche for herself in a traditionally male dominated space.

21. Last week at the Singapore International Cyber Week, she shared she was in good company with other female leaders who are driving crucial conversations about cybersecurity around the world. These include Ms Inge Bryan from the Netherlands who leads the operations of the NCC Group in Continental Europe and sits on the Foundation Board of the Global Forum on Cyber Expertise. There is also Ms Mihoko Matsubara, Chief Cybersecurity Strategist of NTT Corporation in Tokyo, who advises the Japanese government on their cybersecurity R&D programme. She has contributed to global conversations across the East and West.

22. Not all pathways to tech have to start with tech. Ms Maybelline Ooi was a nursing student. In fact, she practiced clinically as a nurse for several years. But driven by her belief in the power of technology to revolutionise healthcare training, she made the leap to set up her own start-up, VIRTUAL.

23. What does VIRTUAL hope to do? It is building a platform that enables the global healthcare community to exchange knowledge through virtual simulation with AI and analytics. And why is this interesting? I spoke with Maybelline earlier. She has very rich clinical experience and knows very well that it is really very difficult for medical professionals to keep up their skills, because they are very busy and time-pressed. They do not have the luxury of attending long-form courses that cover a whole range of topics, that are not necessarily relevant to their immediate needs.

24. So VIRTUAL is seeking to transform the training of our nursing and medical students, and in future, the broader medical fraternity, to enable the use of AI to make the learning more self-directed and bespoke to each individual student's needs.

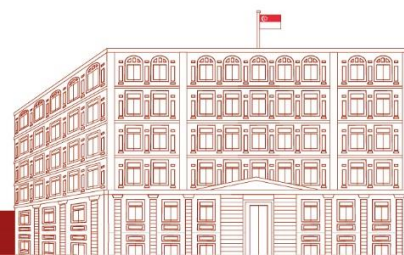
25. For the first time this year, we are also recognising the achievements of 18 very young women in this list. They are pursuing their passion in STEM disciplines, under the new "Girls in Tech" category. They have been nominated by their schools and institutions, in recognition of how they have inspired their peers, as well as made the effort to contribute to the community.

26. Mrunal from Temasek Secondary School started her journey in primary school with the Faraday Challenge in Tech Saturday 2017, where she used Morse code to build a prototype that can establish secure communications. She is now learning to code, and is building a smart home prototype using Microbit, while also teaching coding to kids from disadvantaged backgrounds through the "Code in the Community" project jointly run by Google and IMDA.

27. I also met Giselle (Zixian) from Methodist Girls School, who has also found her passion in coding, electronics and app development, and she has pursued numerous certifications to hone her skillsets. Not only that, she is learning to apply her expertise in meaningful ways, for example, by designing an eye habits-monitoring bookmark, which is designed to support ADHD learners. So if you have special needs, and missed parts of what the teacher covered in the classroom, you should be able to use this device and it will tell you where the attention lapse occurred and where to begin revising from.

28. The unveiling of this list coincides with the *Year of Celebrating SG Women*, and it is timely that we honour the achievements of the women and girls who have made significant contributions to the tech sector and the wider community, and well as showed us that there is no obstacle to girls experimenting with technology.

29. There were so many other stories from the list; I do not have the opportunity to go through all of them, but let me just say that we have a long, good list of women who have broken the glass



ceiling to make the cut into the C-suite roles in MNCs, as well as those who are leveraging their influence to make technology accessible and beneficial for everyone.

30. There is also a list of women navigating uncharted waters, by starting new ventures in research and enterprise, including in deeptech areas like AI, cybersecurity and quantum computing. These stories go a long way in inspiring the girls of our next generation, to write the next chapter of our tech journey.

31. Let me congratulate all the awardees today, and thank SCS for your close partnership with IMDA on the Singapore Women in Tech initiative that it champions. The Tech3 Forum continues to serve as an important platform for us to come together and exchange ideas on how we can leverage digital solutions to rebuild our economy, while redefining the norms and values that guide us to set a firm foundation for our digital future.

32. I wish you all fruitful discussions ahead. Thank you.

