

Charting Higher Education's DIGITAL FUTURE

IHL CIO SUMMIT 2023



AGENDA

ТІМЕ	AGENDA
8:30 am	Registration, breakfast and networking
9:15 am – 9:35 am	Welcome address by IHL CIO Summit Chair (Alvin Ong) and Opening address by IHL CIO Forum Chair (Lau Kai Cheong)
9:35 am – 10:05 am	Keynote session by Prof Alex Siow The Future of Education in a Post-Pandemic World – Trends, Challenges & Opportunities
10:05 am – 10:20 am	Short break
10:20 am – 11:30 am	Panel discussion on "Strategies for digital transformation" moderated by MOE CIO (Panel includes Alex, Kai Cheong, Alvin, Kris, Lek Han, Ming Fai)
11:30 am – 11:45 am	Presentation of token to panellists/speakers
11:45 am – 1:15 pm	Lunch break and networking
1:15 pm – 3:30 pm	PM Tracks (Refer to next page for more information)
3:45 pm – 4:00 pm	Closing remarks by IHL CIO Forum Chair and presentation of tokens to speakers
4:00 pm onwards	Photo taking and visit to Smart Mobility Experience Centre (NTU/ComfortDelGro) (SMEC visit is limited to the CIO group)

AGENDA

PM TRACKS

TRACK 1A: Transforming teaching & Learning (LT 4)	

1:15 pm – 1:45 pm	Embracing data for teaching & learning from ecosystem to capability development (NP)
1:50 pm –	Innovative Pedagogy using
2:20 pm	AR, VR, and AI (NUS)
2:25 pm –	Exam Proctoring on-campus
2:55 pm	& off-campus (SMU)
3:00 pm – 3:30 pm	LearningANTS (ITE)

TRACK 1B: TRANSFORMING TEACHING & LEARNING (LT 6)

1:15 pm – 1:45 pm	Journey into e-Examination: From preliminary pilot to full- scale emergency response to COVID-19 pandemic (SUSS)
1:50 pm – 2:20 pm	SUTD campus X – a new form of cyber-physical learning
2:25 pm – 2:55 pm	Powering to enhance teaching & learning @ NTU
3:00 pm – 3:30 pm	Blended learning space (NIE)

TRACK 2: TRANSFORMING ENTERPRISE (LT 7)

1:15 pm – 1:45 pm	MS Team Integration (RP)
1:50 pm –	SP's Data lake journey in
2:20 pm	GCC@AWS
2:25 pm –	Data Empowerment
2:55 pm	Program in NIE
3:00 pm – 3:30 pm	Digital Enablement (NUS)

TRACK 3: TRANSFORMING SECURITY & INFRASTRUCTURE (LT 8)

1:15 pm – 1:45 pm	How NYP envisions a safe & secure hybrid workforce and empowering teaching & learning using zero-trust strategies
1:50 pm – 2:20 pm	Wireless presentation equipment (WPE) for campus-wide (TP)
2:25 pm – 2:55 pm	Building a cyber security aware ecosystem in NTU
3:00 pm – 3:30 pm	CITRIX BYOD project (SIT)

IHL CIO FORUM CHAIR



Mr Lau Kai Cheong is the Chief Information Officer (CIO) and Vice President (VP) for Integrated Information Technology Services at Singapore Management University. He is an experienced CIO with 16 years of demonstrated history of working in the higher education industry.

Kai Cheong holds a Master's degree from the National University of Singapore and is proficient in many areas, including IT Strategic Planning, Information Management, Business Process Management, Cloud Computing, Project Portfolio Management, Security and IT Service Management. He is currently the chair of the IHL CIO Forum, which comprises of CIOs from the local autonomous universities, polytechnics and ITE.

IHL CIO SUMMIT CHAIR



Mr Alvin Ong is the Chief Information Officer (CIO) of Nanyang Technological University (NTU), working closely with the NTU senior management team to deliver University-wide digital initiatives to enhance teaching and learning, enabling cutting-edge research, and modernising NTU's administrative capabilities and IT Infrastructure. Before joining NTU, Alvin was the group CIO for Alexandra Health System and has over 20 years of experience in the public healthcare sector. Alvin is currently serving on the boards and committees of the National Kidney Foundation Singapore, HCA Hospice Limited, Ang Mo Kio-Thye Hua Kwan Hospital, NTUC Tech Talent Assembly and Singapore Computer Society (SCS) CITPM Board of Assessors, as well as being a fellow with SCS.

Alvin holds a Bachelor of Mechanical Engineering (Honors) from the National University of Singapore and an MBA from the University of Surrey, United Kingdom. He is a certified Chief Information Security Officer (CISO), CITPM (Senior) and COMIT (Senior).

KEYNOTE SPEAKER



Prof Alex Siow is currently Professor (Practice) in the department of Information Systems and Analytics of the School of Computing, National University of Singapore.

Prof Alex was the Managing Director, Health & Public Service at Accenture. Alex started his career as a Structural Engineer in the HDB in 1981 and was appointed the Chief Information Officer in 1989. In 2003, Alex joined the private sector and became the Senior Vice-President of StarHub Ltd. He held various portfolios, including Head, Business Market, CIO and Head, Enterprise Risk Management.

Prof Alex was very active in the IT Community. He was the President of the Singapore Computer Society from 1997 to 2001. He was the President of the IT Management Association from 1995 to 1999. He was the first President of the Singapore Chapter of the Project Management Institute and served from 2001 to 2012. He is also currently the Chairman of the Cloud Security Alliance Singapore Chapter.

KEYNOTE SPEAKER

Prof Alex is currently Chairman of Toffs Technologies Pte Ltd, an independent director of Tee International Ltd, a Director of Thye Hua Kwan Moral Charities and a Director of the Ang Mo Kio-Thye Hua Kwan Hospital. He is also Executive Chairman of DART Consulting and Training Pte Ltd and Director of Red Alpha Pte Ltd, Findjobs Pte Ltd, KSC Consulting Pte Ltd, Chairman of Beyond Technology Pte Ltd and a director of 4P Consulting Pte Ltd. He is a strategic Advisor to Nityo Infotech, ChiefDX, Alibaba Cloud, U3 Infotech, Chainsys, DhataTech and Kitesense. He currently co-chairs the National High Performance Computing Roadmapping Committee.

Prof Alex published his book "Leading with IT: Lessons from Singapore's first CIO" in Feb 2021.

Synopsis

It is widely recognized that the Covid-19 pandemic has been instrumental in changing the landscape of businesses in the public and private sector and also the lifestyle of people all over the world. The education sector also had to go through a period of transformation. Teachers and students were not able to meet physically and had to adjust to having classes and other activities online. Even examinations had to be conducted online. A lot of education technology that were necessary during the pandemic, went on to become an essential part of education. We will have a brief look at how these technologies have transformed pedagogy and learning and what benefits they will be bringing to students and adult learners in the world.

PANEL DISCUSSION

PANEL MODERATOR



TAN BEE TECK CIO/Divisional Director (IT Division), MOE **Mr Tan Bee Teck** is the Senior Director (Education Cluster) in GovTech and the CIO/Divisional Director for IT in the Ministry of Education (MOE). In his capacity as the Senior Director (Education Cluster) and Ministry Family CIO, Bee Teck oversees and coordinates the digitalisation and digital government efforts across the entire Lifelong Learning continuum through working with MOE, Schools, Polys and ITE, Singapore Examination and Assessment Board, Science Centre Board, SkillsFuture Singapore. Prior to his current appointment, Bee Teck was the Cluster Director for Justice & Law, Deputy Director (IT) with the Ministry of Manpower, and Deputy CIO for the Defence Science & Technology Agency (DSTA).

PANEL MEMBERS



PROF ALEX SIOW Professor (Practice), School of Computing, NUS



ALVIN ONG Chief Information Officer, NTU



ANG LEK HAN Director (IT), SUTD



KRIS O'BRIEN Divisional Director, NIE



LAU KAI CHEONG Chief Information Officer and Vice President (Integrated IT Services), SMU



TANG MING FAI Director (IT Services), TP

TRACK 1A: TRANSFORMING TEACHING & LEARNING (LT 4)

() 1:15 PM – 1:45 PM

EMBRACING DATA FOR TEACHING & LEARNING FROM ECOSYSTEM TO CAPABILITY DEVELOPMENT (NP)

Ngee Ann Polytechnic (NP) consolidated the various early efforts of its data analytics journey in 2018 with an enlarged vision to enable NP to leverage quality data for effective Teaching & Learning, Policy Making and Operational Efficiency. To accomplish this vision, NP architected a hub-and-spokes structure that involved a lean core data analytics (DA) team in driving NP DA development in partnership with schools and departments to build in-house capability across the institution. A fluid approach was adopted in establishing the necessary data infrastructure to enable the hub-and-spokes structure.

In the presentation, NP will outline its journey and how we attempted to orchestrate the key elements of the technology & infrastructure ecosystem, governance, and capability development. We will also share key lessons learnt and the road ahead.

SPEAKER

Mr Hang Kim Yam is the Data Strategy Lead at Ngee Ann Polytechnic, responsible for driving data analytics capability development to help the polytechnic unlock the value of its data assets. He and his team of passionate data analysts in the Centre of Learning and Teaching Excellence work in partnership with departments and schools to help develop citizen data analysts and self-service data analytics capability. He firmly believes in the hands-on approach when working with stakeholders to understand their needs and challenges.

TRACK 1A: TRANSFORMING TEACHING & LEARNING (LT 4)

() 1:50 PM - 2:20 PM INNOVATIVE PEDAGOGY USING AR, VR, AND AI (NUS)

National University of Singapore (NUS) IT has successfully used inter-reality technologies to achieve innovative pedagogy over the past few years. Immersive technologies are particularly useful in emulating teaching scenarios that are difficult or impossible to simulate in real life. We will share and demonstrate some of the recent projects we have done and highlight the critical success factors when embarking on such projects.

SPEAKER

Mr John Yap, as Associate Director at the National University of Singapore, leads an innovation team that designs and develops working and teaching/learning solutions for both enterprise and academic faculties. Leveraging state-of-the-art technologies like virtual and augmented reality, the team has established various impactful enterprise transformations and novel pedagogical implementations.

TRACK 1A: TRANSFORMING TEACHING & LEARNING (LT 4)

() 2:25 PM – 2:55 PM

EXAM PROCTORING ON-CAMPUS AND OFF-CAMPUS (SMU)

While Singapore Management University (SMU) has conducted online assessments and examinations for many years, the usage of proctoring and other examination related tools increased significantly during the COVID-19 pandemic.

In this session, SMU will:

- provide an overview of the tools used in proctoring, support and grading, as well as the selection considerations
- share the support processes we have before, during and after online/remote examinations and the measures to handle unexpected scenarios
- · summarise the learning points over the years and share the next steps going forward

SPEAKERS

Mr Lim Tee Seng and **Mr Aaron Pon** lead the operations and user support for the teaching and learning system at Singapore Management University, including online exams for faculty and students. Over the years, they have successfully managed thousands of online exams both on-campus and remotely. While the experiences gained stood them in good stead during the pandemic, there were many challenges and valuable lessons that they had also learnt.

TRACK 1A: TRANSFORMING TEACHING & LEARNING (LT 4)

() 3:00 PM - 3:30 PM

LEARNINGANTS (LEARNING ANALYTICS NETWORKED TUTORING SYSTEM) (ITE)

LearningANTS (Learning Analytics Networked Tutoring System) is an AI-enabled learning system that supports differentiated learning with adaptive practice assignments in mathematics. Designed by Singapore Polytechnic, the Institute of Technical Education (ITE) was encouraged to deploy the system to raise the mathematics proficiency level of our students. A pilot conducted in 2018 received positive feedback from both staff and students. The system has since been rolled out to all students taking the Bridging Mathematics module as well as other Applied Mathematics modules in ITE.

In this session, ITE will share how the system:

- has supplemented lecturer efforts to personalise learning for students with different levels of mathematics abilities
- has provided lecturers with opportunities to draw on data analytics to explore innovative teaching strategies
- has empowered students to become self-directed learners with greater ownership over their own learning

SPEAKERS

Dr Theresa Thang has been engaged in e-learning endeavours since 2000. During her tenure as Divisional Director, Theresa formulated user-centric policies and led her teams to provide professional development and technical and pedagogical consultancy to all academic staff. She engaged stakeholders at all levels to ensure that ITE could attain strategic, organisational, pedagogical and technical readiness to sustain and deepen ICT integration in curriculum delivery.

Mr Tan Boon Haur supports teaching and learning in the Institute of Education with the Educational Design and Technology Division. He currently leads the implementation of LearningANTS, an adaptive learning system, and explorations in the use of learning analytics.

TRACK 1B: TRANSFORMING TEACHING & LEARNING (LT 6)

() 1:15 PM – 1:45 PM

JOURNEY INTO E-EXAMINATION: FROM PRELIMINARY PILOT TO FULL-SCALE EMERGENCY RESPONSE TO COVID-19 PANDEMIC (SUSS)

The Singapore University of Social Sciences (SUSS) embarked upon its journey into e-Examination (eExam) in Nov 2018 when the University started a pilot to conduct high stake examinations electronically for two courses from the School of Business and School of Law, respectively. In this presentation, SUSS will walk through their experience from initiating a small-scale pilot for on-site eExam to campus-wide deployment of take-home eExam as part of the emergency response to the COVID-19 pandemic. Details on their technical support and training, challenges and issues encountered, feedback from students and faculty, and future plans will be shared. This experience sharing will serve as a good reference with useful takeaways and learning points for institutions looking into the similar deployment of technology-enhanced assessment.

SPEAKER

Mr Lee Chye Seng has over 20 years of experience leading large-scale eLearning initiatives and spearheading Learning Technology for higher education. He is currently the Director of Learning Systems and Applications at the Singapore University of Social Sciences (SUSS). He was formerly the Divisional Director of Learning Technologies at Nanyang Technological University.

Chye Seng sits on the Board of Directors with eLearning Forum Asia (eLFA), a non-profit organisation that enables sharing best practices among international communities through annual eLearning conferences. He is also actively involved in community outreach of Learning Technology through user group activities and has been chairing the Singapore Canvas User Group.

TRACK 1B: TRANSFORMING TEACHING & LEARNING (LT 6)

() 1:50 PM – 2:20 PM SUTD CAMPUS X - A NEW FORM OF CYBER-PHYSICAL LEARNING

SUTD has introduced a new digital learning platform called SUTD campusX to provide a human-centric, cyber-physical learning environment that aims to bring back the joy and fun of learning. The platform will use emerging technologies such as gamification, metaverse, and immersive realities to connect learners, instructors, and peers in an interactive environment. SUTD plans to accelerate and expand the use of this platform by 2026 and create a cyber-physical campus by 2030. The initiative involves working with external collaborators and extending the platform to like-minded partners in different geographical regions to take advantage of the innovative set-up. SUTD will share insights on the latest development and real lessons under SUTD campusX, including lessons learnt.

SPEAKER

Prof Pey Kin Leong is the Associate Provost for Digital Technology and the founding Associate Provost to set up the Singapore University of Technology & Design (SUTD) undergraduate programme in 2010.

Prof Pey received his Bachelor of Engineering and Ph.D in Electrical Engineering from the National University of Singapore (NUS). He has held Fellowship appointment in the Singapore-MIT Alliance and various research positions at the Institute of Microelectronics, Chartered Semiconductor Manufacturing, Agilent Technologies and NUS.

Prof Pey received the Public Administration Medal (Silver) in 2016 and serves on the Board of Governors, Temasek Polytechnic, the Advisory Board, School of Electrical and Electronics Engineering, Singapore Polytechnic, and the Engineering Advisory Committee, Ngee Ann Polytechnic Council, Singapore.

TRACK 1B: TRANSFORMING TEACHING & LEARNING (LT 6)

() 2:25 PM – 2:55 PM POWERING TO ENHANCE TEACHING & LEARNING @ NTU

Nanyang Technological University is committed to trailblazing progressive standards of excellence in teaching and learning by embracing innovative digital technologies facilitating pedagogy in the post-pandemic era. In this session, we aim to deliver key insights derived through various projects over the last 18 months that enabled the implementation of technologies and strategic partnerships. These enhance the overall teaching and learning experience where careful considerations and a data collection framework are applied. The following three projects include:

- 1. Interdisciplinary Collaborative Core Courses Learning Space for TBL
- 2. MOOC Credit Transfer for Undergraduate Education
- 3. Technology Impact Reporting for Sustainability and Timely Interventions

SPEAKER

As the Deputy Director of Learning Tech & Digital Media at the Centre for IT Services at Nanyang Technological University (NTU), **Mr Chua Chet Shiu** manages the implementation of technology to improve teaching and learning within the university. With over a decade of experience at NTU, he has a proven track record of enhancing the student experience through the use of digital tools, systems, and content. Prior to joining NTU, Chet worked as an educator, e-learning solutionist, and education technologist.

TRACK 1B: TRANSFORMING TEACHING & LEARNING (LT 6)

() 3:00 PM - 3:30 PM BLENDED LEARNING SPACE (NIE)

The National Institute of Education (NIE) recognises the need to update its learning spaces to accommodate the post-pandemic world's evolving educational and technological landscapes. NIE's Blended Learning Spaces aim to cater to different learning needs and pedagogies by implementing robust technological solutions. These include a high-bandwidth wireless network, an immersive digital environment, technology-agnostic design, and virtual desktop infrastructure (VDI) to provide a standardised remote learning platform with enhanced endpoint security. These solutions enable synchronous and asynchronous learning and create a seamless experience across devices and systems with no special adaptations, allowing for future-ready learning spaces that support blended teaching and learning.

SPEAKERS

Mr Dave Tay Tien Hee is the Unit Head, IT Service Delivery in the Service Management department at the National Institute of Education (NIE). He has over 20 years of experience supporting and implementing teaching and learning solutions that synergise technology with pedagogical needs. Dave was a key member of the committee that defined the IT blueprint for Learning Spaces in NIE.

Mr Lee Boon Yeong Simon is the IT Teaching & Learning Support Manager in the National Institute of Education (NIE) Service Management department. He has over 20 years of experience in supporting and implementing Audio Visual (AV) infrastructure in NIE learning & meeting spaces. He has implemented numerous key IT projects in NIE, such as NIE Visitor Learning Center (NIEVLC), Collaborative Classrooms, DV LED Display System in the conference room, etc. He was appointed as the co-lead for a committee tasked to define an IT blueprint for NIE.

TRACK 2: TRANSFORMING ENTERPRISE (LT 7)

() 1:15 PM - 1:45 PM MS TEAM INTEGRATION (RP)

Republic Polytechnic (RP) replaced its existing on-premise Skype for Business (SFB) with Voice over Internet Protocol (VOIP) services to cloud-based Microsoft (MS) Teams with VOIP services. All staff are assigned a Direct Dial In (DDI) number to make outgoing calls and receive incoming calls via MS Teams and certified hard-phones. MS Teams features to enhance students' online learning and staff collaboration experience. RP would like to share the learning points from the migration and how we used MS Teams to support student learning.

SPEAKERS

Mr Christopher Lee manages the common services and application operations teams that are integral to applications in Republic Polytechnic (RP). Under his leadership, the telephony services and staff DIDs were migrated seamlessly to the cloud from the traditional on premises ISDN circuit. He also leads the use of MS Teams and video conferencing tools to meet the hybrid mode of meetings in the new normal.

Ms Lin Qiuling manages various application systems in RP, and she is no stranger to cutting-edge technology, leading her to win multiple MOE Innergy awards. With her recent portfolio to helm the learning-related applications, she sees MS Teams as an integral platform for learning in a hybrid mode after the Covid-19 pandemic.

With the success of DIY student laptop Onboarding which was shared in the IHL CIO Forum 2019, Christopher and Qiuling collaborated once again to exploit the full potential of the MS Teams capabilities to meet both RP's corporate and academic needs.

TRACK 2: TRANSFORMING ENTERPRISE (LT 7)

() 1:50 PM - 2:20 PM SP'S DATA LAKE JOURNEY IN GCC@AWS

To support the increasing interest on data analytics, we embarked on the journey to set up a Data Lake. We implemented the Data Lake in the GCC AWS Cloud, using various AWS services including S3, Glue, Crawler, Lake Formation and Athena to store, ingest, transform, catalog and secure the data. Analytics tool like Power BI can be used to access and analyse the data.

Some examples of data sets in the data lake include data ingestions from Workday and data provisioning to Brightspace. We have also started building up PET datasets by ingesting student data from our PeopleSoft Campus Solution.

SPEAKER

Ms Xu Guang is experienced in application development, software administration and service management and is curently the Project Manager in-charge of setting up the Data Lake in Singapore Polytechnic (SP). Before her role in the Data Lake project, she gained her data analytics related experience by managing the Power BI services in SP and leading the joint-poly AiE PFP project.

TRACK 2: TRANSFORMING ENTERPRISE (LT 7)

© 2:25 PM – 2:55 PM DATA EMPOWERMENT PROGRAM IN NIE

The Data Empowerment program is a multi-year initiative at the National Institute of Education (NIE) to create a culture of data-driven decision-making. The program has a three-phased approach, with the current phase focusing on implementing 18 use cases across teaching, research, and administration. The program aims to leverage data analytics to improve core processes and achieve better student outcomes, research support, and administrative processes. The initiative includes the use of an enterprise data platform, the training of data champions, and the implementation of robust data policies. Additionally, the program aims to create a data culture through roadshows and clinics and leverage AI for auto insights to achieve data democratisation in the final phase.

SPEAKERS

Mr Jacky Wong Kae Perng is the Cluster Head, Digital Library Services and Resources at the National Institute of Education Library and Information Services Centre (LIBRIS). He is an experienced systems librarian with decades of experience in implementing transformative Library technologies. Jacky is also the co-lead for Data Empowerment in NIE, providing leadership on various strategic business domains and data management.

Ms Lim Pei Pei is the Assistant Director of Data Analytics Solutions in National Institute of Education. She is an experienced technologist who works with various NIE stakeholders to help them harness optimal data usage. She is the co-lead for Data Empowerment in NIE, leading the data analysts and data champions on the technical implementation of data visualisation and engineering projects.

TRACK 2: TRANSFORMING ENTERPRISE (LT 7)

() 3:00 PM - 3:30 PM DIGITAL ENABLEMENT (NUS)

Implementing cutting-edge solutions requires a digitally adept workforce that is conversant with multiple digital tools. The National University of Singapore (NUS) IT started a Digital Enablement programme in 2019 to contribute towards raising the digital dexterity of NUS staff. This includes the following:

- Provision of classes and workshops to acquire digital tools proficiency eg RPA, Web Content Management, Data Visualization, Forms & Flow etc.
- Lead Communities of Practice to encourage the adoption and upgrading of digital skill sets.
- Scour, review and introduce new useful digital tools for staff and students.

We have trained over 5,000 staff over ten digital tools to date. NUS will share our Digital Enablement journey, the strategies we employ, and our plans ahead.

SPEAKER

Mr Tan Keok Tay, an Associate Director in National University of Singapore (NUS) is currently leading the Digital Enablement team in the Information Technology department. In line with improving digital dexterity and encouraging lifelong learning in the University, the team helps to introduce new digital tools and organise trainings and workshops for the NUS community.

TRACK 3: TRANSFORMING SECURITY & INFRASTRUCTURE (LT 8)

🕓 1:15 PM – 1:45 PM

HOW NYP ENVISIONS A SAFE AND SECURE HYBRID WORKFORCE AND EMPOWERING TEACHING AND LEARNING USING ZERO-TRUST STRATEGIES (NYP)

Enabling our educators to teach using the appropriate pedagogy and Edtech tools and adapting to a hybrid workforce have always been a challenge for compliance and governance.

Join us to learn how Nanyang Polytechnic designed and piloted a zero-trust architecture to overcome security challenges and improve Teaching and Learning and hybrid work.

SPEAKER

Mr Jeffery Tay is a veteran in the local education industry with experience in designing, implementing and securing large-scale campus-wide solutions. He is currently the Deputy Director (ICT Infrastructure & Cybersecurity) and Chief Information Security Officer at Nanyang Polytechnic. He provides strategic direction and leads cross-functional teams comprising Server & Cloud Technology, Network & Data Centre Services, User Computing Management & Cybersecurity.

TRACK 3: TRANSFORMING SECURITY & INFRASTRUCTURE (LT 8)

() 1:50 PM – 2:20 PM

WIRELESS PRESENTATION EQUIPMENT (WPE) FOR CAMPUS-WIDE (TP)

The wireless-enabled AV presentation system will allow students, staff, and visitors to present content wirelessly from their devices without the need for conventional video cable such as VGA, HDMI, as long as their devices are connected to the Temasek Polytechnic (TP) network.

In this session, TP will:

- share how we overcame common AV issues such as cable wear and tear, and the ability to support BYOD laptops of different display outputs with the use of WPE
- share how WPE facilitates a more engaging teaching and learning environment, especially in the collaborative setting
- share the challenges encountered during the implementation stage

SPEAKERS

Mr Michael Yap is the Assistant Director for Digital Services at Temasek Polytechnic. His areas of responsibility include learning & corporate systems and data management. His IT experiences are mainly in IT Application Implementation & Integration, as well as data management and analytics in recent years. In addition, he is actively involved in TP's digital learning and digital campus initiatives.

Mr Kenneth Goh is a key member of the Digital Services team at Temasek Polytechnic. He participated in the implementation of the Learning Content Recording Management System and wireless presentation system. In addition, he is actively involved in TP's digital learning initiatives, such as the learning management system and hybrid classroom learning system.

TRACK 3: TRANSFORMING SECURITY & INFRASTRUCTURE (LT 8)

○ 2:25 PM – 2:55 PM

BUILDING A CYBER SECURITY AWARE ECOSYSTEM IN NTU

In the face of increasingly sophisticated cyber threats, Nanyang Technological University (NTU) has developed a holistic cybersecurity awareness ecosystem that drives synergistic innovation across people, processes, and technology. To cultivate a strong security culture that builds on collective responsibility, NTU's Cyber Aware Ecosystem is a central element of their strategy to empower over 40,000 students and staff with the knowledge and capabilities to keep NTU cyber safe. In this talk, the speaker will share insights into their cyber security awareness programme journey, which has garnered several internal and external awards.

Reference:

NTU Singapore bags 'Cybersecurity Education award' accolade at SBR Technology Excellence Awards 2022 | Singapore Business Review

SPEAKER

Mr Christopher Lek leads the cyber security team for Nanyang Technological University. He has over 20 years of professional experience spanning the telecommunication and financial sectors as well as global conglomerates. He held different roles, from governance, risk management, and security architecture to cyber defence. He was recognised as one of the top 30 Cyber Security executives for driving business value, leadership and influencing change in the inaugural CS030 ASEAN awards 2021 and 2022. Being a member of the senior leadership team within the IT organisation, Christopher has transformed the cyber security landscape for NTU over the last few years. He has forged close partnerships with various entities in the organisation to address the rapidly changing security threats to the university.

TRACK 3: TRANSFORMING SECURITY & INFRASTRUCTURE (LT 8)

() 3:00 PM - 3:30 PM CITRIX BYOD PROJECT (SIT)

As part of the Singapore Institute of Technology (SIT) journey to strengthen SIT's defence against cyber intrusions and prevention of sensitive data leakages on non-institution issued devices, we have embarked on Citrix Secure Private Access solution which enables us to tackle the key BYOD risks as well as meeting the needs of the hybrid staff population adopting different device types for their areas of work.

SPEAKER

Ms Chok San San is an IT professional with over 15 years of enterprise solutions delivery experience. Her primary job function focuses on exploring emerging technologies for implementation at the Singapore Institute of Technology. She is passionate about working on innovative solutions to solve real-life problems and strongly advocates designing solutions to maximise user experiences.

DIRECTIONS TO VENUE

Get to **NTU LT2A, North Spine** easily by car, public transport or via NTU's shuttle bus service.

BY CAR

Park at any of the 4 carparks and walk to LT2A, North Spine (refer to map on next page for more information).

BY BUS

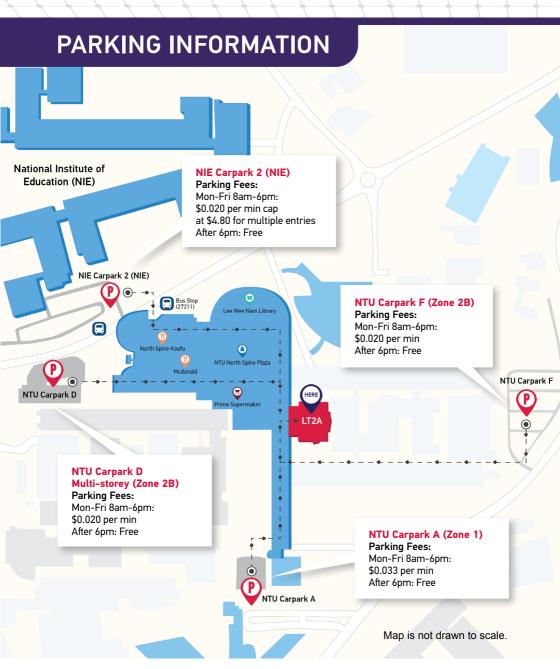
Bus Service 179

The bus will depart from Boon Lay Bus Interchange and travel along Jurong West, Pioneer Station Exit A, Pioneer Road, Lien Ying Chow Drive. Alight at **Lee Wee Nam Library bus stop (27211)** along Nanyang Drive and walk to LT2A, North Spine. In <u>NTU Maps</u>, search for LT2A (NS).

BY NTU SHUTTLE BUS SERVICE OR TAXI

Campus Rider is a free shuttle bus service to and from Pioneer MRT station (Exit B). Alight at **NTU Admin Building (taxi drop-off location)** and walk to LT2A, North Spine. In <u>NTU Maps</u>, search for LT2A (NS).





IHL CIO SUMMIT 2023

Appreciation to IHL CIO Summit Planning & Executing Team

Alvin Ong (Chair, Organising Comm) Kris O'Brien (Co-Chair, Organising Comm) Benjamin Yeo (Organising Comm) Jessie Sng (Working Comm) Patrick Chan (Working Comm) Poh Foong Gek (Working Comm) Arina Ong (Digital Media) Eric Bonneau (Digital Media) Ng Sui Ling (Digital Media)

CHARTING HIGHER EDUCATION'S **DIGITAL FUTURE**

Nanyang Technological University 50 Nanyang Ave, Singapore 639798