

## Executive Summary of Achievements and Ongoing Work in Education, Research, and Service

The realms of education, research, and service are rich with potential. Research insights fuel my teaching and shape my curriculum design, while service empowers me to transform knowledge into action, creating a meaningful impact. Figure 1 at the end of this section depicts the salient achievements I discussed below.

**Research Impact:** My research centers on digital transformation, focusing on the design, deployment, and evaluation of technological innovations. I explore how integrating information, computing, and communication technologies enhances entities. My work highlights two main areas: digital commerce (offering digital services like online shopping aids and privacy-focused mobile applications) and digital organization (promoting efficiency and performance). This research provides insights into the effects of digital advancements both within organizations and in engaging with external knowledge through open innovation.

[1] My research in digital commerce examines how Information Systems influence consumer decision-making and enhance commercial communications. A key achievement is my doctoral dissertation, “Assessing Screening and Evaluation Decision Support Systems: A Resource-Matching Approach,” published in *Information Systems Research* in 2010, which highlighted how online shopping aids improve decision performance by aligning cognitive resources with task demands. Collaborating with PhD students, I explored simulated online environments, resulting in the publication “Sequentiality of Product Review Information Provision: An Information Foraging Perspective” in *MIS Quarterly* (2017), which demonstrated how timely product reviews can reduce cognitive overload and improve decision-making.

In my collaborative efforts, I conducted field experiments in China and Switzerland to assess the effectiveness of personal communication technologies (PCTs) across cultural contexts. Our findings, published in *Information Systems Research* (2014), indicated that SMS is more effective in high-context cultures like China, while email is better in low-context cultures like Switzerland. Additionally, I developed a smartphone app focusing on the balance between personalization and privacy, published in *MIS Quarterly* (2013), which won the INFORMS ISS Design Science Award. This research has garnered over 620 citations.

I am exploring the transformative impact of artificial intelligence (AI) in digital commerce, particularly in enhancing consumer engagement through innovative strategies related to digital coupon-sharing behaviors. This ongoing research aims to address concerns about perceived financial motivation in these interactions.

[2] My second research stream, Digital Organization, explores how information systems (IS) can enhance organizational operations. I focus on enterprise systems (ES) and their role in breaking down departmental barriers during digital transformation. Key findings from various empirical studies indicate that leadership styles, support structures, and system characteristics significantly influence effective ES use, impacting job performance and satisfaction (forthcoming in *Information Systems Research* 2025). Additionally, I investigated how IS aids in acquiring external resources and boosting innovation performance (published in *Information & Management* 2022 and *Information Systems Journal* 2022, the latter winning the Top Cited Article award for 2022-2023). My work also addresses digital-enabled resource orchestration for knowledge sharing in open-source communities (highlighted in *MIS Quarterly* 2019 and *Long Range Planning* 2011). I aim to integrate internal and external aspects of digital organization to innovate healthcare solutions for Singapore's aging population, including a paper on IS dynamics in public hospitals that won the Best Paper Award from AIS SIGHealth in 2018. A recent study on addressing the urban-rural divide in healthcare services received the Information Management Research Award (2023) and was highlighted by Prof. Andrew Burton-Jones at a conference. I have also co-authored an editorial for the *Information Systems Research* 2025 issue, outlining future research themes with leading healthcare IS scholars.

I am studying how IS can promote collaboration among non-profit organizations during natural disasters in Southeast Asia, in partnership with key disaster management agencies. Preliminary results have been shared at conferences like ICIS 2023 and 2024, and CIST 2022. I am also addressing challenges related to Singapore's aging population and rising healthcare demands. My first journal paper, which examined IS

use in public hospitals, won the Best Paper Award from AIS SIGHealth in 2018. Recent studies focus on implementing healthcare IS in Chinese public hospitals, linking IS affordances to societal impacts and highlighting policy implications. This research significantly contributes to academic literature and enhances organizational performance while addressing societal challenges.

The following achievements underscore a distinguished academic and research career characterized by research publications, collaborative engagement with industry, leadership in editorial positions, and teaching excellence.

*[1] Research Recognitions: Best Paper Awards*

- 2018: Best Paper Award, AIS SIGHealth
- 2014: Recognized among the Best 12 Research Papers at HCI International; Best European Paper Nominee
- 2013: INFORMS ISS Design Science Award for Outstanding Design Science Project; Best Conference Paper Nominee at the 17th PACIS
- 2006: Best Paper Award at the World Congress on Intellectual Capital (WCIC); Dean's Graduate Award for Excellence in Research from NUS

*[2] Research Recognitions in the University: NUS Expert Panel*

A series of academic and advisory roles held at the NUS, including various expert panel memberships and committee positions spanning from 2019 to 2026.

*[3] Research Recognition in the Discipline: Editorial Board and Program Committee Roles*

- 2023-Present: Associate Editor for Information Systems Research
- 2016-2020: Associate Editor for MIS Quarterly
- 2012-2024: Editorial Review Board member for JAIS
- Invitations as Program Chair for PACIS (future), Doctorate Consortium co-chair for PACIS (2024), Program co-chair for HCI International (2015-2017), and multiple roles in ICIS and PACIS over the years.

*[4] Research Recognition in the Discipline: Mentorship*

- Repeatedly served as mentors in top IS journal paper development workshops (e.g., JAIS 2015; MIS Quarterly 2022; Information Systems Research 2024, 2025)
- Repeatedly invited to serve as mentors in university-organized paper development workshops (e.g., University of Nottingham workshop 2024; Baptist University of Hong Kong workshop 2023, 2018, 2025, among others]
- Invited visits/talks at ETH Zurich, University of Sydney, University of New South Wales, Zhejiang University, Fudan University, Huazhong University of Science and Technology, The University of Hong Kong, Chinese University of Hong Kong, Suzhou University, ESSEC, University of Manchester, University of Warwick, among others.

*[5] Research Recognition: Industry*

- 2022-Present: Research on Digital Transformation of Primary Care with Alexandra Hospital in Singapore.
- 2020-Present: Research on Digitalization for Disaster Response with various non-profit organizations (NGOs), including the United Nations (UN) and BNPB.
- Invited by HaiDiLao Group to provide consultation on digital transformation and served as an invited expert on digitization by the Singapore Accreditation Council.

*[6] Research Grants*

- Principal Investigator (PI) for multiple research projects totaling over SG\$ 600,000 in funding, focusing on IT usage in disaster response, open-source development, and the digital economy.
- Co-PI for a SSRTG grant worth SG\$5,188,640; and co-I of SIA-NUS Digital Aviation Corporate Laboratory (SG\$45 million)
- Co-I on external grants, including the competitive grants from China and others.

*[6] Selected Major Publications*

- Published in top-tier journals such as Information Systems Research and MIS Quarterly, with works recognized for their contributions to healthcare, enterprise systems, and information management. Notably, I received the Information Management Research Award in 2023.

**Education Excellence:** My teaching philosophy is centered on facilitating a dynamic learning environment through four fundamental principles: clarity, contemplation, collaboration, and the navigation of ambiguity. For instance, I promote critical engagement by connecting assignments to real-world business challenges, such as the analysis of cybersecurity breaches. My experiences as a Business Excellence Assessor for Enterprise Singapore and as a NUS Project Prioritization Committee member (the only member from the NUS School of Computing) enable me to create relevant and impactful assignments. My dedication to fostering clarity, contemplation, collaboration, and embracing ambiguity has significantly enhanced students' learning experiences, preparing them to become thoughtful leaders and innovators in an ever-evolving world.

My research on digital transformation has directly informed me of my teaching, leading to the creation and delivery of the courses IS5002 Digital Transformation and IND5004 Digital Infrastructure and Transformation. Since joining NUS in 2016, I have received an average student feedback score of 4.82 out of 5.00 at the Ph.D. level, 4.53 out of 5.00 at the master's level, and 4.18 out of 5.00 at the undergraduate level. Additionally, I have conducted over ten executive workshops for senior management and professionals on digital transformation.

Beyond my role in course-level teaching and design, I had the honor of serving as the **Department Curriculum Chair** from 2016 to 2021. During this period, I revamped existing degree programs and designed several new ones, including six double-degree programs and a comprehensive Bachelor of Technology in Business Analytics for part-time adult learners.

I continuously reflect on my teaching practices and share my insights in pedagogy through three published articles focused on training computing students to be agile in information systems development. I am grateful to have received two Faculty Teaching Excellence Awards in 2017 and 2024 and a Faculty Best Teaching Assistant Award in 2004.

**Service Leadership:** Below, I summarize some key achievements based on the service roles I assumed. These highlight significant contributions and initiatives to enhance research, education, and community within the department and university.

- **Deputy Head (Research and Administration)** of DISA (July 2021 - August 2024)

*[1] Promoted Research Excellence*

- Initiated and led an annual Information Systems summer research workshop from 2022 to 2024, fostering academic exchanges among junior faculty, PhD students, and senior scholars.
- Chaired the review to update the department's publication lists for journals and conferences, ensuring alignment with current research trends.
- Biannual review of Faculty Research Committee (FRC) grant applications, shaping the future of research and funding for innovative proposals.
- Collaborated with the School of Computing's Communications Office to highlight faculty research achievements.
- Mentored junior faculty, enhancing their professional development.

*[2] Nurtured Future Researchers*

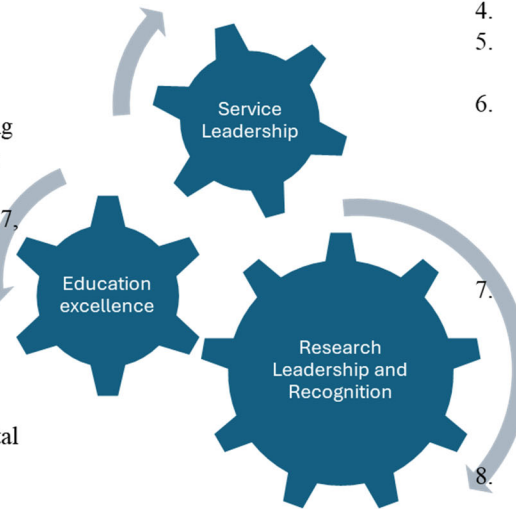
- Overhauled the PhD student experience by redesigning the curriculum and transitioning students to a dynamic research lab.
- Worked with PhD coordinators to effectively market the program and manage admissions.
- Organized workshops to promote social interactions and community-building among PhD students.

### Service leadership

1. Deputy department head (research administration) [2021.07~2024.08]
2. Deputy department head (programs) [2016.07~2021.06]
3. NUS project prioritization committee [2022.09~2024.08]
4. Business Excellence Assessor, Enterprise Singapore
5. Consulted HaidiLao Group on digital transformation

### Education excellence

1. Average Student Feedback Score since joining NUS in 2016: 4.82 (PhD level), 4.53 (Master level), 4.18 (undergraduate level)
2. Two faculty teaching excellence awards (2017, 2024) and a faculty best teaching assistant award in 2004
3. Nominated from current and graduated PhD students for the NUS Outstanding Graduate Mentor Award 2025.
4. Conducted over 10 executive workshops for senior management and professionals in digital transformation.
5. Authored three pedagogy articles on training students to be agile in IS development based on experience and reflection from teaching.
6. Revamped existing degree programs and designed several new degree programs (e.g., six double degree programs, Bachelor of Technology (Business Analytics) as the DISA Curriculum Chair (2016~2021).



### Research leadership and recognition

1. Productivity: Authored 57 (journal papers, among which 10 are in MIS Quarterly and Information Systems Research) + 68 (conference/workshop paper proceedings) + 1 (book chapter)
2. Impact: 31 (h-index), 65 (i10-index), 77.8% in the top 5% of journal publications (2020-2024)
4. Best paper awards (5) + INFORMS Design Science Award 2013
5. Recognized as an expert (within NUS) - URC expert panel of NUS since 2019
6. Championing research excellence
  - Associate Editor in top two IS journals (MIS Quarterly and Information Systems Research), with Outstanding Associate Editor Award in 2016
  - Assumed program co-chairs and track co-chairs repeatedly in leading IS conferences
7. Nurturing researchers
  - Graduated seven PhD students (all with academic job offers)
  - Invited scholars to top IS journal paper development workshops and university-specific research workshops
  - Invited talks (e.g., ETH Zurich, University of Hong Kong, Zhejiang University, Fudan University)
8. Recognition from industry
  - Research collaborations with organizations on digital transformation, including government ministries (e.g., MINDEF, IMDA), NGOs (e.g., UN, BNPB), and corporations (non-disclosure due to NDA)
9. Grants
  - 10 (as PI), 1 (as co-PI; SG\$5m), and 4 research grants as Co-I (among which one is SG\$45m)

Figure 1. Summary of Salient Achievements

- **Deputy Head (Degree Programs and Teaching)** of DISA (July 2016 - June 2021)

*[1] Degree Programs*

- Oversaw undergraduate and postgraduate degree programs, facilitating curriculum changes and public promotions.
- Established MOUs with Standard Chartered Bank and IBM, leading to courses focused on digital transformation, gaining significant media attention.

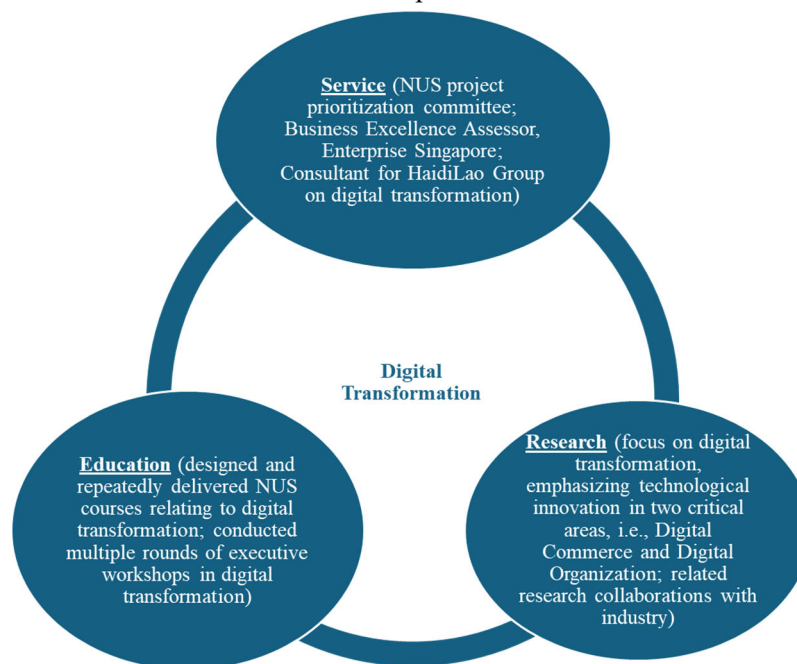
*[2] Student Admissions*

- Streamlined the process for shortlisting and admitting prospective undergraduate students while providing academic advisory services.

- **NUS Project Prioritization Committee Member** (September 2022 - August 2024)

- Played a key role in reviewing and approving IT project proposals, ensuring alignment with NUS's ITSP Strategic Plan (2023-2027).

In addition to these service roles within the NUS, since 2017, I have held various academic roles, including reviewer for the Hong Kong Research Grant Council, external examiner, and assessor at multiple universities. I have also served as an invited scholar to evaluate PhD students' research work at several universities. Figure 1 provides an overview of my key accomplishments across research, education, and service, effectively illustrating my development and successes as a scholar and educator in these interrelated domains of work. I have deliberately sought to integrate these domains through a shared knowledge base focused on digital transformation, as illustrated in Figure 2. I am dedicated to making a substantial contribution to the advancement of knowledge and practice concerning the transformation of organizations and society through digital technologies and innovations. Attaining the full professorship would provide opportunities for me to assume more directive and impactful roles.



**Figure 2.** Interconnectedness of Research, Education, and Service