

NUS CTIC Newsletter

LETTER FROM THE MANAGEMENT

Welcome to the sixth issue of the Centre for Trusted Internet and Community (CTIC) Newsletter!

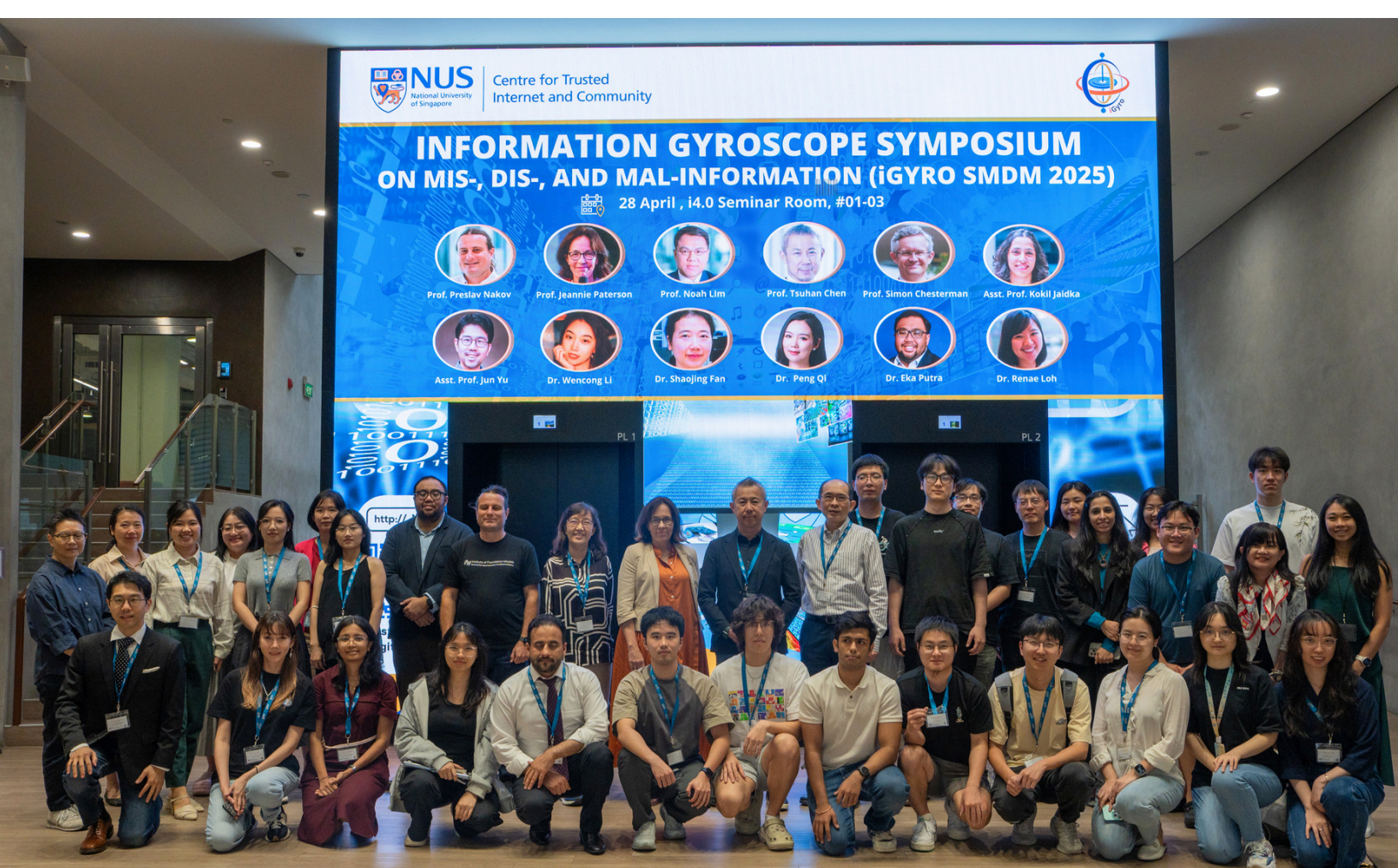
The rapid rise of misinformation, online scams, and AI-driven threats such as deepfakes is a growing concern, undermining public trust, democratic processes, and individual safety. Addressing these challenges requires a national, whole-of-society effort that brings together institutions, technology platforms, policymakers, and the public to strengthen digital resilience.

At CTIC, we bring together expertise from computer science, social science, law, and policy to develop research-driven solutions. Recent research milestones include the Information Gyroscope (iGYRO) programme, advancing innovative tools and partnerships to combat misinformation, and the Digital Wellbeing Indicator Framework (DWIF)—adopted by IMDA as a national reference for digital wellness. Both reflect our commitment to building Digital Information Resilience, enabling society to navigate, withstand, and respond to the complex realities of today's information environment.

Here's to another year of collaboration, innovation, and shared success in the new academic year 2025/2026.

Warm regards,
Mong Li and Audrey

RESEARCH HIGHLIGHTS



Information Gyroscope (iGYRO) Digital Information Resilience: Restoring Trust and Nudging Behaviours in Digitalisation

The [Information Gyroscope \(iGYRO\)](#) is a five-year programme that integrates behavioural science, technology, and policy research to tackle misinformation and strengthen digital resilience. The team has developed tools such as [SNIFFER](#) for detecting out-of-context misinformation, [DiversiNews](#) for promoting viewpoint diversity, Multilingual [QACheck](#) for multi-language fact-checking, and [RAMP](#) for disrupting harmful information spread. To date, iGYRO researchers have published over 30 papers in leading venues including ACM MM, EMNLP, ACL, AACL, and Policy & Society.



A major milestone was the inaugural [iGYRO Symposium on Mis-, Dis-, and Mal-Information \(SMDM\)](#) in May 2025, which brought together over 100 experts and stakeholders to discuss challenges in digital ecosystems. Highlights included keynotes by Prof. Preslav Nakov and Prof. Jeannie Paterson, alongside panels, demos, and research showcases.

iGYRO's impact is strengthened through industry partnerships with VoiceCode Technology and AI Seer, addressing challenges from detecting forged media to verifying facts at scale, and accelerating innovations that counter misinformation.



Digital Wellbeing Indicator Framework (DWIF)

We partnered with the DQ Institute to develop the [Digital Wellbeing Indicator Framework \(DWIF\)](#), the first comprehensive framework measuring digital wellbeing across five domains and three levels of digital citizenship.

The [Living Well Digitally Platform](#) was launched to provide tools and resources that promote healthier digital habits. DWIF has been recognised by IMDA as a national reference for digital wellness and literacy initiatives. To support community education, we collaborated with the National Library Board to develop a [learning package](#) and an [animated explainer video](#) for schools and libraries, and hosted the [Digital Wellbeing Spotlight](#) workshop in January 2025 to engage key stakeholders.

Internationally, we partner with Fudan University and National Yang Ming Chiao Tung University to apply the DWIF across cultures. The centre contributes to UNESCO's cultural policy work through Prof. Audrey Yue, highlighting CTIC's leadership in digital wellbeing and resilience.

MEDIA SPOTLIGHTS



[The Big Story: Are you confident in identifying deep fakes? Think again](#)

Assoc. Prof. Terence Sim shares the escalating risks of deepfakes, rising overconfidence, and why public awareness and a whole-of-nation approach are vital to tackling scams and misinformation. Money FM 89.3, July 2025.



[AI, deepfakes and their threat to elections | GE2025](#)

Prof. Anthony Tung warns that convincing deepfakes risk blurring truth and falsehood, and sees Singapore's Elections (Integrity of Online Advertising) Amendment Bill as a step toward greater awareness. The Straits Times, 28 April 2025.



[Commentary: If we don't shape the internet, others will](#)

As online harm laws tighten and social media standards rise, users must reflect on interactions, sharing, and accountability, says Dr Chew Han Ei. Channel NewsAsia. 18 February 2025.

PARTNERSHIPS



Mr. Dennis Yap presenting Facticity.AI to iGYRO members at CTIC

Partnership with AI Seer to Advance Real-Time Fact-Checking

We are collaborating with AI Seer, a start-up founded by Mr. Dennis Yap, to advance real-time claim verification. In March 2025, Mr. Yap presented his award-winning application, [Facticity.AI](#), to iGYRO members. As part of this collaboration, we shared our research on verifying temporal and multimodal claims. Together, we are working to strengthen digital information resilience and bolster industry-academic efforts to counter online harms.



(Left) Prof Mohan Kankanhalli, NUS, with (right) Joanna Ding, Voicecode Technology

Collaboration with Voicecode to Enhance Digital Security

Together with Voicecode Technology, we are tackling rising digital security challenges in multimedia forensics. The partnership focuses on detecting forged images, verifying audio-video consistency, and developing multimodal identity authentication tools. Under the agreement signed on 3 May 2024, the collaboration aims to deliver solutions that strengthen digital trust and resilience.



Welcoming visitors from NYCU, Taiwan, for a fruitful collaboration meeting

Partnership with NYCU on Digital Wellbeing in Taiwan

We are partnering with [National Yang Ming Chiao Tung University \(NYCU\)](#) to explore digital wellbeing in Taiwan using our recently-launched [Digital Wellbeing Indicator Framework \(DWIF\)](#). We provided a validated Mandarin translation, while NYCU collected survey data and will present findings in an online workshop, alongside comparative analyses and joint publications.

DISTINGUISHED VISITORS AND DELEGATION



NUS Board of Trustees Chairman, Mr. Hsieh Fu Hua, at iGYRO demo. May 2024.



NUS President, Prof. Tan Eng Chye, at iGYRO interactive showcase. March 2025



ADM+S and Digital Asia Hub at CTIC to scope AI for Development initiative by IDRC and FCDO. May 2025.



Delegation from ITRI, Taiwan (ROC) and Taipei Representative Office in Singapore. July 2025.

The Summer Institute in Computational Social Science (SICSS) - Singapore 2025



A week of interdisciplinary learning and computational discovery

We co-hosted the [Summer Institute in Computational Social Science – Singapore](#) from 7–14 July with the [NUS Department of Communications and New Media](#), supported by the [Centre for Computational Social Science and Humanities \(CSSH\)](#) and the global [SICSS](#) network. Over the week, 16 early-career researchers and 13 invited speakers came together for an intensive programme of lectures, interactive workshops, and team-based research. Topics ranged from LLMs and AI ethics to online harms and synthetic population data, culminating in original project presentations by participants.

iGYRO Policy Roundtable on Misinformation and Disinformation



Engaging policymakers in a dynamic exchange to tackle misinformation and disinformation

The [Information Gyroscope \(iGYRO\) Policy Roundtable on Misinformation and Disinformation](#), held on 14 January 2025 at NUS CTIC, gathered policymakers and academics for a candid exchange on today's digital information challenges. Featuring insights from Prof. Chen Tsuhan, Prof. Simon Chesterman, Prof. Audrey Yue, and Asst. Prof. Araz Taeiagh, discussions spanned the impact of “harmful yet lawful” content, the governance of generative AI, and global policy options, while underscoring the need to safeguard freedom of speech. The session also highlighted a holistic framework to build digital resilience, empowering individuals and institutions to better withstand information threats.

Workshop for the Oxford Handbook on Misinformation and Disinformation



A gathering of minds on misinformation and disinformation

From 25–26 April 2025, we hosted a two-day [authors' workshop](#) at the [Lee Kuan Yew School of Public Policy](#) to develop the forthcoming Oxford Handbook on Misinformation and Disinformation. The workshop brought together leading scholars from diverse disciplines to examine how digital technologies facilitate the spread of false and harmful information. Aiming to bridge theory and practice, the Handbook will offer an integrated framework for understanding today's complex information landscape.

ALT-RIGHT-SCIENCE. The Alarming Polarisation of Science & Medicine in the Right and Far-Right Media



(Left) A/P Ophir with (Right) Asst. Prof. Mukerjee at the CTIC Seminar

Our seminar on [The Alarming Polarisation of Science & Medicine in Right and Far-Right Media](#), held on 16 August 2024, featured overseas guest speaker Assoc. Prof. Yotam Ophir (University at Buffalo) in a compelling discussion on the politicisation of science. Moderated by Asst. Prof. Subhayan Mukerjee (NUS), the seminar examined how topics such as vaccines and climate change, have been reframed through partisan lenses. Drawing on nationally representative surveys and two decades of computational analyses, the session highlighted how this growing polarisation shapes public opinion and poses urgent challenges for effective science communication in today's information environment.

MEET OUR RESEARCHERS



Meet **Prof. Anthony Tung** (Department of Computer Science, NUS), one of our Principal Investigators for the Information Gyroscope (iGYRO) project. Prof. Tung has spent over two decades advancing how we manage, mine, and make sense of complex data—from DNA indexing and anomaly detection to systems that empower non-experts to explore information intuitively. His recent focus is on strengthening the trustworthiness of online information. With projects like [DiversiNews](#) and its extension [NewsKaleido](#), his team is developing tools that surface diverse perspectives, explain differences in reporting, and detect half-truths. Guided by the belief that progress comes from asking new questions shaped by societal shifts, Prof. Tung's research continues to push for technologies that help us navigate today's digital information landscape with greater resilience and critical reflection. Read the full interview with Prof. Tung [here](#).



Introducing **Dr. Eka Nugraha Putra**, one of our Research Fellows working on the iGYRO project. Dr. Putra examines how [legislation worldwide responds to misinformation, disinformation, and malinformation \(MDM\)](#), mapping the sharp rise of “fake news” laws from 1995 to 2023. His research combines global surveys with case studies of countries with the strongest sanctions, assessing whether these laws effectively curb harmful content without unduly restricting free expression. Beyond his work at CTIC, he recently published [Free Speech in Indonesia](#), which underscores the broader challenges of aligning national laws with international human rights standards. Together, his research contributes to iGYRO's mission of building digital information resilience by showing how legal, educational, and institutional approaches can complement one another. Read the full interview with Dr. Putra [here](#).



Dr. Jiaying Wu is a Research Fellow with the iGYRO team. Her work examines how AI can strengthen communication and trust in today's fast changing digital landscape. Rather than reducing misinformation to a simple matter of fact versus falsehood, she studies it as a set of narratives shaped by framing, amplification, and interpretation. Her research aims to [uncover misleading intent](#), and develop automated “Community Notes” that provide timely, balanced explanations on social media. Motivated by the belief that research should ultimately serve the public good, she combines technical innovation with insights from communication and policy to build AI systems that not only detect misinformation but also help people better understand and engage with credible knowledge—contributing to more resilient and trustworthy online spaces. Read the full interview with Dr. Wu [here](#).