

NEWS RELEASE

Singapore, 6 February 2024

NTU Singapore President Professor Ho Teck Hua lays out AI ambition for University's next wave of growth

- *New interdisciplinary AI degree programme and premier scholars programme among new academic offerings*

Professor Ho Teck Hua, the fifth President of Nanyang Technological University, Singapore (NTU Singapore), today announced the University's new ambition to address the global opportunities and challenges brought about by the rise of artificial intelligence (AI).

At the heart of this endeavour is a **boost in AI education, research, and innovation efforts** to nurture socially conscious AI talent and develop human-centric AI solutions.

Among the new academic offerings this year are the interdisciplinary **Bachelor of Science in AI and Society** degree programme, the **Turing AI Scholars Programme**, and a Minor in AI for all undergraduates.

In the pipeline are **more undergraduate and postgraduate offerings in AI and computing** to uplift the digital capabilities of NTU graduates and the broader workforce.

These initiatives are in line with Singapore's refreshed national AI strategy to triple the AI talent pool, develop a trusted AI ecosystem, and use AI to drive innovation and economic growth.

NTU's big push in AI will allow the University to continue to attract and retain the best and brightest minds, cementing its position as a world-class university in its next phase of growth, said Professor Ho, who joined NTU in April 2023.

Prof Ho, who is also the Founding Executive Chairman of AI Singapore, said: "As AI becomes pervasive, Singapore needs more top AI scientists and engineers who possess the right minds, hearts, and hands to design, program, and deploy ethical and human-centric AI solutions – a team of AI superheroes working to make Singapore a smarter nation. As a leader in AI research with close ties to industry, NTU is uniquely

positioned to bring together the best minds in the field for this purpose.”

Cultivating “AI superheroes”

AI is a truly game-changing technology. It has the potential to deliver substantial benefits to society but could cause serious harm if it is used in a socially irresponsible manner.

Building on NTU’s existing strengths in AI, data science, and computing, the University will develop new undergraduate offerings in these areas, starting with the **Bachelor of Science in AI and Society** degree programme.

This highly competitive, four-year interdisciplinary programme will have an inaugural intake of 60 students in August this year. Students will study courses that provide them with the necessary mathematical and computing foundations to design and develop high quality AI solutions.

At the same time, they will learn about potential misuses of AI that can result in greater inequality, hiring biases, and the propagation of misinformation.

Students enrolled in the Bachelor of AI and Society degree programme can apply to join the new, highly competitive **Turing AI Scholars Programme**, which will have a first-year intake of 30 students.

Named in honour of Alan Turing, the father of modern computer science and AI, the premier scholars programme is open to students in Computer Science, Data Science and AI, and AI and Society. It is designed to nurture exceptionally talented students who want to advance AI research and develop cutting-edge solutions to change the world for the better.

Turing AI scholars will get to conduct research in their second year under the supervision of a distinguished professor in AI. These students will spend their third year **overseas**, with one semester of study **at a top university**, and one semester at an internship with an **AI industry leader**.

Building career resilience in a future powered by computing and AI

Recognising the need to help the broader student population thrive in a future powered by computing and AI, NTU will introduce a **Minor in AI** programme, which will be available to all undergraduates.

Students will learn how AI and data science can be applied to solve problems in different domains. They will have the flexibility to choose interdisciplinary electives depending on their majors or interests. This will help make students more career

resilient in an AI-driven world.

The new minor comes on top of NTU's **mandatory modules on digital literacy** as part of its Interdisciplinary Collaborative Core curriculum.

In addition, NTU is developing industry-relevant continuing education **programmes in computing and data science** to equip the broader workforce in Singapore with digital skills in order to enhance their career resilience.

Some of the newly introduced educational programmes include:

- **Bachelor of Technology in Computing**, a part-time Work-Study Degree Programme for working professionals looking to pivot to or progress within the information and digital technologies sector.
- **Master of Science in Blockchain**, which emphasises understanding and applying blockchain technologies in areas such as finance, banking, supply chain, and healthcare in AI.
- **FlexiMasters in Cybersecurity and Digital Trust**, a tie-up between NTU and Mastercard to equip adults with the skills and technologies used in cybersecurity.

Prof Ho said: “There is no doubt that AI will increasingly affect more facets of our society. Everyone needs to develop a basic understanding of it so we can come to a consensus on how AI should be used. AI must be human-centric to help everyone to realise their full potential. AI should also be used for the greater social good. NTU is well positioned to create an ecosystem to help people prepare for the changes brought about by AI.”

Showcasing new creative possibilities with AI

In line with the University's big push towards AI, the latest issue of NTU's award-winning campus magazine, **HEY! was entirely co-created with generative AI technologies**.

The cover features a human persona, **Hailey**, who transforms seamlessly into an augmented reality (AR) video when scanned using an AR app. The NTU editorial team also used AI in copyediting, drafting headlines and captions, writing stories from interview transcripts, and generating photos and illustrations.

The issue shines a spotlight on how AI is being taught, developed, and applied across disciplines at NTU, from engineering to the humanities and social sciences, as well as in various technological and creative projects.

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About Nanyang Technological University, Singapore

A research-intensive public university, Nanyang Technological University, Singapore (NTU Singapore) has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Medicine, Humanities, Arts, & Social Sciences, and Graduate colleges.

NTU is also home to world-renowned autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies, and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Earth Observatory of Singapore, Nanyang Environment & Water Research Institute and Energy Research Institute @ NTU (ERI@N).

Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

Ranked amongst the world's top universities, the University's main campus is also frequently listed among the world's most beautiful. Known for its sustainability, NTU has achieved 100% Green Mark Platinum certification for all its eligible building projects. Apart from its main campus, NTU also has a medical campus in Novena, Singapore's healthcare district.

For more information, visit www.ntu.edu.sg

ANNEX

Bachelor of Science in AI and Society degree programme

The four-year undergraduate degree programme provides a strong technical foundation in AI and extensive practical exposure to ethical AI system design, development, and deployment in real-world settings and across the entire AI lifecycle. It also exposes students to issues in sociology and the societal impact of AI technology.

The programme structure is designed with increasing flexibility as students advance through the degree. Students will have the option to specialise in either the technical or societal pathway or opt for a selective mix of electives based on their individual interests. This empowers students to tailor their academic journey in alignment with their evolving preferences and career aspirations.

Some unique compulsory courses include Ethical AI (issues in ethical AI and how they can be mitigated, changing regulatory landscape, etc.) and AI for Society (applications and latest development in AI in different domains, how they benefit society and their potential risk to society).

Through practical and hands-on elements in the curriculum, such as group projects and a 20-week internship, students will get to apply Responsible AI concepts (developing and deploying AI from both an ethical and legal point of view).

Students are also required to complete a Responsible AI capstone project, during which they will apply their AI skills responsibly to a real-world problem and make a positive impact on specific social groups, social causes, or industrial sectors.

The programme will start off with an intake of 60 in August this year and is expected to go up to 100 in the new academic year starting in August 2025.

NTU's strengths in AI, data science and computing

NTU holds a strong global position in the fields of AI, data science, and computing, according to various global metrics. We are ranked 2nd and 6th by the US News and World Report 2023 in AI and Computer Science, respectively. In addition, NTU's Data Science and Artificial Intelligence programme was listed by Forbes as one of the 10 best AI and Data Science undergraduate programmes in the world.

The University is ranked among the top universities globally for AI and data science and is home to renowned faculty who are at the forefront of the AI revolution.

These strengths have attracted industry heavyweights such as Rolls-Royce, Hewlett Packard, and SingTel, to set up AI and data science corporate laboratories at NTU.