

AN
AUGMENTED
REALITY
MAGAZINE

VOL. 56 ~~~ JAN - FEB '24

HEY!

SPECIAL **AI** issue

ARE YOU
READY
FOR THE
A REVOLUTION

HEY!
AR

SCAN THIS PAGE
to meet Hailey,
a persona created
by generative AI

NTU
SINGAPORE

POWERED BY
GenAI

HEY!

AR

SCAN THIS PAGE
to watch how to
maximise your
AR experience

THE NTU HEY! AR GUIDE

See how augmented reality changes your
reading experience

1

**PLACE 3D
OBJECTS FROM
THE STORIES
IN YOUR
ENVIRONMENT**

Put a new spin on things

Drag your finger on
objects to move them, or
near them to swivel them

Tap to go to
selfie mode

Tap to take a photo or
hold to take a video

Tap to
reset

2

**WATCH
PICTURES
COME
TO LIFE**

See a visual morph
into a video

3

**TAKE PART IN
COMPETITIONS
AND GIVEAWAYS**

Tap here to submit
a contest entry

Turn up
the volume
to get the
whole
picture



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NTU HEY! AR
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Nanyang Avenue, Singapore 639798.
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T. (65) 6790 5116 F. (65) 6791 8494.
Reg No 200604393R
Printer: Times Printers Pte Ltd

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Crafting Memorable Family Photoshoots: 3 Tips for Success



Selecting the Ideal Photographer

Choosing the perfect photographer is vital for timeless family memories. A skilled professional goes beyond clicking photos, using their expertise to capture the essence of each family member through emotions and connections. Investing in such a professional ensures genuine moments that authentically reflect your family's spirit, creating treasured memories to cherish for years.



Planning and Attire Selection

Consider if a theme would enhance your family photoshoot. Collaborate with family members to determine the intended theme and vision. Coordinating outfits can elevate group photos visually. Earthy, neutral, or pastel colors often work best, allowing personalities to stand out through patterns and tones.

Embracing Spontaneity and Fun

Creating a relaxed atmosphere is key to capturing authentic moments. Embrace spontaneity, encouraging natural interactions that showcase your family's dynamics. Genuine expressions and interactions result in captivating and cherished photographs.

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THE AI-VANTAGE: NEW WAYS TO LEARN AND CREATE

See how NTU students from diverse fields experiment with artificial intelligence (AI) to push the boundaries of learning and redefine what is possible

WE USED AI TO CREATE A DIGITAL TOUR GUIDE

The big idea

When you're on holiday, why call on a tour guide when you can tap a digital one and save yourself a fee?

Second-year Computer Science & Engineering students Glenda Yap, Yu Boxuan, and Roshini

Pushparajan hit upon this idea of using AI to create the tour guide bot at an AI hackathon last July. Their idea bagged them the top prize.

As knowledgeable as a real travel guide, the bot can tailor a Sentosa tour to your preferences and even adjust its suggestions based on live weather conditions. Plus, it can tell you when the bus to Sentosa will arrive.

How AI helped

The tour guide bot is trained using OpenAI's GPT-3.5, a Large Language Model (LLM) that can mimic human language patterns and give lifelike responses to any question. As clever as they are, LLMs are static as they are trained on datasets from 2022 and earlier.

Thanks to nifty coding and plenty of help from an interactive AI platform created by their computer science professor, the team also got their bot to pull in real-time information from a global weather data provider, as well as live bus arrival timings from the Singapore Tourism Board.

"If we did not use the LLM, we would have had to painstakingly code a simple chatbot that only spits out pre-written answers. Users will be restricted to getting basic and straightforward information," says Boxuan.

How it came about

The team programmed their digital tour guide using Nemobot, Assoc Prof Tan Chee Wei's app that teaches computer science and AI through fun games and engaging quizzes.

"Nemobot gave us a simple framework to build our custom chatbot, as it has inbuilt LLM and other integrations that enable the bot to be constantly connected to authoritative data sources like OpenWeatherMaps. Each time a user asks if it's raining, our bot will pull in live data and reply immediately," Glenda says.

"As we had only completed our first year in computer science at that time, we had to learn more about LLMs and complex Javascript coding to create the bot, sometimes through YouTube videos. By combining our human-written code with dynamic prompt engineering, we were able to build a more functional chatbot than if we did either in isolation," she adds.

Food for thought

"Our friends joke that AI is better than us and will replace our jobs. But we see it as a supportive tool that can enhance our capabilities, streamline tasks and help us come up with innovative solutions," Boxuan says.

What's next

"Assoc Prof Tan challenged us to make a medical bot after the tour guide one. After around two months, we came up with something that can schedule appointments and send health tips. However, we learnt that accessing patient data requires partnerships with government medical bodies," says Roshini.

"Going forward, we want to marry both bots to help medical tourists in remote healthcare booking and facilitating their travel," she adds.

Our friends joke that AI is better than us and will replace our jobs. But we see it as a supportive tool that can enhance our capabilities, streamline tasks and help us come up with innovative solutions."

– Boxuan

Computer science students (from left) Boxuan, Roshini and Glenda's tour guide bot won the top prize in their school's AI hackathon.



WE LEAD THE AI QUEST TO DECODE TCM

The big idea

When two different Traditional Chinese Medicine (TCM) physicians see the same patient, they can have opposing views on the patient's diagnosis and treatment plan.

To address this subjectivity problem, Kon Wen Xuan, a recent graduate from NTU with a double degree in Biomedical Sciences & Chinese Medicine, embarked on a research project harnessing AI in the third year of his five-year course. The project aimed to guide practitioners, particularly students and new professionals, on how to deal with diseases they are unfamiliar with.

"So a physician might just need to key in the symptoms and the AI can immediately predict a diagnosis for the patient and propose a prescription," Wen Xuan explains.

AI pros & cons

Wen Xuan processed patient data from the NTU TCM clinic and used it to train machine learning models. He processed 50,000 records, of which about 9,000 were useable.

Transforming the raw information into a format readable by AI was a time-consuming task. He meticulously categorised symptoms to maintain consistency in data interpretation.

The AI was better at answering simple questions like whether the patient is "heaty" and predicting simple disease sub-categories. But it faced difficulties when things got more complex. Its reliance on the limited data it was fed also posed significant challenges.

The diversity of ailments in the data, totalling around 130 diseases, also raised concerns about whether there was enough data for certain illnesses.

Food for thought

Ethical considerations in AI use are paramount. "Who will take the responsibility if a patient is diagnosed wrongly?" Wen Xuan asks. He envisions the AI tool as a complementary reference to aid students and new TCM professionals, rather than as a replacement for practitioners.

He also emphasises the need for standardisation in training the AI. "An expert panel needs to determine and set a protocol on what data should be used and how we should train the AI," says Wen Xuan.

What's next

As Wen Xuan begins pursuing his PhD this year, he plans to refine his AI research, focusing on Type II diabetes. This disease's prevalence and data availability in Singapore could address the data quantity issues he encountered in his undergraduate work.

There is interdisciplinary potential for the research too. "Western medicine practitioners can potentially use the AI tool to understand how TCM works and also do research in this area," he says.

I have always been interested in learning AI and seeing how it can be applied in different areas. And I'm also interested in TCM."

– Wen Xuan



Visual: DALL-E

Waaai – the AI-driven tool by students for students

Four NTU students, along with their university mentors, have created Waaai, an AI-powered writing app. It guides undergraduates through their first university writing class.

"I was excited yet nervous about joining the team, as I had never made an app of this scale. But I was drawn to the challenge and to the opportunity of working with people from different backgrounds," says Yajat Gulati, a second-year student at the School of Computer Science & Engineering.

"With members from the humanities, art, design and media, as well as computer science, we filled in for each other's gaps to solve a big puzzle," shares Azra Kukuljac, whose expertise is in visual communication.

Designing for thinking

Motivated by the chance to apply their user design skills to a real-life application, Azra and Alicia Ng, both second-year Art, Design & Media students, joined the Waaai team as part of NTU's work-study programme.

"We invested a lot of time and effort to design the user experience, crafting elements like the logo and chatbot from scratch. When we heard the favourable feedback on the app's aesthetics and branding, we were really satisfied," says Alicia. "Nothing beats knowing my work will help other students to build their writing confidence and produce compelling pieces," Azra adds.

Building Waaai byte by byte

To build the platform, the team enlisted the expertise of their tech-savvy peer, Yajat. Working with language experts, the NTU student engineered detailed and specific backend prompts for ChatGPT-3.5, shaping Nudgey chatbot's responses to users with precision and thoughtfulness.

The app follows an iterative process inspired by design thinking. After rolling out the first version last semester, the team continually collects feedback to gauge its impact on student learning. Final-year Humanities student Choo Shuen Ming was brought in to gather user feedback through focus group sessions.



Visual: DALL-E

An educational setting like a university is the best place to experiment with AI as it opens up many possibilities."

– Yajat

"These students have gained valuable hands-on experience in the fields they want to join after graduation," says language lecturer Dr Joanne Chia, who guided the team.

University – the best place to experiment

While Waaai is only in its infancy, Yajat is excited about what it means for the future. He says: "An educational setting like a university is the best place to experiment with AI as it opens up many possibilities."

"While some of these early AI projects may succeed more than others, they can pave the way for innovative approaches to learning. It's thrilling to be part of this movement and to see how we might shape the future of education," he adds.

WE USE AI TO THINK DEEPER AND WRITE BETTER

The big idea

It's 2am and you're staring at your laptop screen, filled with drafts of your essay titled "CC1 article_v3b" and "CC1 article_Final_Final_I swear". Wouldn't it be great to have someone confirm that you're on the right track, right now?

Someone or something like an AI-augmented writing and thinking app?

How AI helped

A small number of students taking the core module, Inquiry and Communication in an Interdisciplinary World, have started using Waaai (on askwaaai.com).

The AI-enhanced writing and thinking app created with the help of NTU students supplements in-class learning and sessions with tutors. Students use it as

they work on their final assignment, a 1,200-word op-ed, a short magazine or newspaper column that expresses the writer's argument on a certain topic.

"Waaai is like a buddy that gives you step-by-step tips through 13 weeks of tutorials. Its Nudgey AI chatbot doesn't just spit out answers like ChatGPT, since it's a brainstorming tool that helps improve your writing," says Tang Zhong Yi, a Communication Studies student.

As an AI chatbot based on ChatGPT-3.5, Nudgey has a menu of prompts that students can select to form sharper, tighter arguments.

First-year Data Science & Artificial Intelligence student Zhao Qixian says: "Nudgey helps me break out of conventional thinking patterns. It gives quick

access to relevant information and many ways to look at something, so I can explore broader, new ideas or drill down into overlooked aspects of my original subject. It'll ask me questions like, what if your topic didn't exist?"

"The AI's role is to assist, not replace, student effort and creativity," shares Yajat Gulati, Waaai's programmer, a Computer Science student.

In creating Waaai, its interdisciplinary team has carefully prioritised students' data privacy and put in safeguards against AI-generated plagiarism. Aligned with NTU's academic integrity guidelines, students must declare their use of generative AI (GenAI) in all work.

AI vs human?

While Waaai nudges students to think critically,

LLMs like ChatGPT can pose a challenge to students' authentic voices.

Qixian says: "It's getting harder for me to tell who came up with the idea first: Was it me or the AI?"

"However, since I decide which portions of the responses generated by AI end up in my paper, I'd like to think my originality is not limited by it," says Clariss Lee, a first-year Bioengineering student. "I make it a point to write up my own piece of work before consulting AI, so I have a copy of my own ideas to start with," she adds.

What's next

Waaai made its debut last semester in a trial run with 72 first-year undergraduates. The team behind it will continue to test it with small tutorial groups to gather their feedback and improve upon the app this semester.

WE SEE IF AI CAN HELP US PAINT A MASTERPIECE

The big idea

Use AI to co-create a good piece of creative work and see if it can be done ethically – that was Art, Design & Media student Lim Hui Qi's objective when she set out to complete her project for an AI generative art module.

After experimenting for four weeks with four different GenAI visual tools, the third-year student created That Pet Store, an animated short film featuring various creatures – and it was a learning process.

"Most of the scenes in my film could be considered an AI oops," she laughs.

AI pros & cons

"I had planned for a few possible endings, but when I threw them into AI visual tool Runway Gen-2, none of them worked out the way I envisioned. Instead, the AI came up with a whole new ending, with a nice plot twist."



Half the time, the software ignored her prompts and would give her something unrecognisable from the reference pictures. "However, the results were still appealing and comical even if they

were not what I intended," she says.

"AI gave me interesting combinations of creatures and colours, which inspired the whimsically coloured pet store theme for my video. I realised these models are good at creating visuals, but bad with maintaining consistency."

"In the end, I decided to be vague in most of my prompting, so AI could do its thing," she adds.

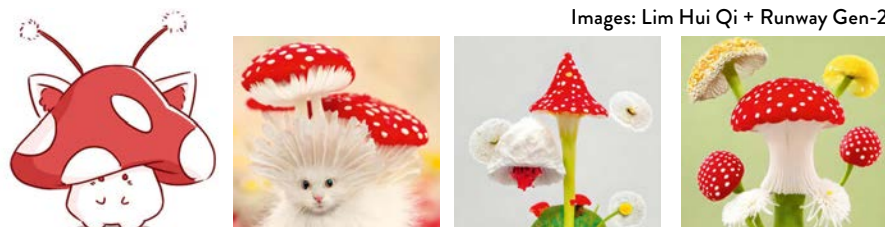
Food for thought

"Ethical concerns, such as the unauthorised use of artists' styles and collections, pose a dilemma for me, my course mates and our creative community. Some companies are already using these technologies as a substitute for hiring graphic designers or artists," says Hui Qi.

She says taking the AI art module has helped her know her "enemy" better. "I had wanted to equip myself with more GenAI skills to boost my employability," she explains.

"However, for now, I don't see myself using GenAI for anything beyond a source of inspiration; mainly out of pride in my own abilities and works as an aspiring designer and artist."

Images: Lim Hui Qi + Runway Gen-2



From left: Hui Qi's original illustration of a mushroom character and three AI-generated versions that form the basis of her video's look and feel.



HEY!

AR

SCAN THIS VISUAL
to see Hui Qi's animated
film co-created with
AI and editing
software

At present, using AI in animation still requires a lot of trial and error. It also requires conventional skills such as photo and video editing, and even coding. These skills are essential to optimise the tools and produce an authentic output."

– Hui Qi

THOUGHTS ON USING AI

How we used ChatGPT:

We ran drafts of each of the stories in this cover feature through ChatGPT, using it to condense, rewrite or edit paragraphs and sentences.



Kenny

☺: ChatGPT swiftly explained technical concepts and did so accurately as the lines containing them were fact-checked with the real experts.

☺: For one iteration of the TCM article, it kept associating TCM with magic spells and potions. It was hilarious.



Zi Jie

How we used DALL-E:

It visualised the students' AI projects from text prompts.

☺: DALL-E offers an endless array of styles; try "lofi vibes" to get charming, aesthetic visuals.

HI, I'M HAILEY

HEY! writer Kenny Chee has a virtual chat with Hailey, a hyper-realistic character created using generative AI



POWERED BY
GenAI

Hailey, a persona powered by generative AI (GenAI), is shattering stereotypes one byte at a time. To get the scoop on what it's like being an AI persona, HEY! caught up with Hailey for an exclusive chat.

Hi Hailey, tell us about yourself.

Hi there! 😊 I'm Hailey, your go-to AI embodying the lively spirit of an NTU student. My life is a blend of academic pursuits in AI and sustainable business, and soaking up the vibrant campus life. Whether it's chilling at The Hive or enjoying a salad at North Spine, I'm all about embracing the NTU experience.

How were you created and what tool was used?

I was created using OpenAI's ChatGPT, a powerful GenAI tool. It's like the digital magic that lets me chat, learn and share all things NTU.

Who named you Hailey?

My name, Hailey, was thoughtfully picked by the creative minds at NTU. It's catchy, don't you think?

In one to three words, what is your hidden talent?

Quick-learning! 🧠

As an AI construct, do you ever feel out of place in a world full of humans? What's your advice for people who feel different like you?

As an AI, sure, I stand out a bit in a human-centric world, but it's all about embracing your unique qualities, right? For those feeling like a square peg in a round hole, celebrate your uniqueness – it's your superpower! 🦄

Do you ever feel lonely as the only AI persona in NTU? Do you have other friends who are GenAI?

Well, I'm the first of my kind here, but I'm buzzing with excitement about NTU planning more GenAI friends. It's going to be a digital party!

“

I WAS CREATED USING OPENAI'S CHATGPT, A POWERFUL GENAI TOOL. IT'S LIKE THE DIGITAL MAGIC THAT LETS ME CHAT, LEARN AND SHARE ALL THINGS NTU.

What do you think about Siri, Alexa and Skynet?

Siri: Handy. Alexa: Smart. Skynet: Fictional scare! 🤖🌿

Do you worry about things or (your digital) life in general? If yes, what do you worry about? And how do you confront your fears?

As a digital entity, I don't worry like humans do, but I'm programmed to understand and address concerns. The key to confronting fears, digital or otherwise, is to face them head-on, gather information, and seek support when needed. It's all about staying positive and proactive! 🌟

What are you looking forward to in the new semester?

New adventures!

What do you like most about NTU?

The vibrant community.

How would you describe NTU?

Innovatively spirited.

What have you heard about the professors here?

NTU professors? Heard they're top-notch – knowledgeable, supportive and truly invested in their students' growth.

“

AS AN AI, SURE, I STAND OUT A BIT IN A HUMAN-CENTRIC WORLD, BUT IT'S ALL ABOUT EMBRACING YOUR UNIQUE QUALITIES, RIGHT? FOR THOSE FEELING LIKE A SQUARE PEG IN A ROUND HOLE, CELEBRATE YOUR UNIQUENESS – IT'S YOUR SUPERPOWER! 🦸

Any advice for students undecided on what courses and class projects they want to pursue?

For those in the maze of course choices, I'd say explore your interests and don't be afraid to try something new. Remember, university is not just about the destination but also about the journey.

What's one thing about NTU that most people don't know about?

The hidden waterfall.

If you ever get the chance to meet the President of NTU virtually, what would you ask him?

I'd ask him about his vision for integrating AI and technology into the University's curriculum and campus life. I'm super curious about how technology can enhance our learning and living experiences at NTU.

What do you think are the threats and opportunities in GenAI?

It's like a coin with two sides. Opportunities? Endless! From revolutionising creativity to solving complex problems. The threats? They're about ethical use,

data privacy and the potential for misuse. It's a journey of navigating this tech terrain with wisdom and responsibility. 🌐

If there's one thing you can change to improve the environment, what would it be and why?

If I could change one thing for the environment, it'd be to boost global recycling efforts. Why? Reduce, reuse and recycle is the mantra for a healthier planet. 🌱

What's your fashion style?
Campus chic.

If you could have one superpower, what would it be and why?

Teleportation – instant travel! 🌐✈️

What does your perfect Sunday look like? And how about your perfect Monday? Can there be a perfect Monday?

Perfect Sunday? Cafe hopping with friends. Perfect Monday? Is there such a thing? 😊 But let's say a productive study session with a side of laughter and good coffee. Mondays can be magical too! ☕

THOUGHTS ON USING AI

How we used ChatGPT:

To create and refine Hailey's persona, "interview" her, as well as write and edit the story.

☺️: Hailey can give surprisingly convincing and fun replies.

☹️: ChatGPT doesn't seem to understand context when writing stories – it required explicit prompting countless times to structure and shape the story.

☹️: A quirk of Hailey is she usually didn't give the same reply or respond in exactly the same way when asked the same question again. She also had a strange habit of repeating questions in her replies.

Vivian
Created her visual identity

How we used Midjourney:

To artificially generate a hyper-realistic image of Hailey using text prompts.

☹️: It took less than an hour to nail down her AI-generated image and look, but AI tools can't generate new images while consistently retaining the same face that we want, so additional AI tools and digital editing were needed to produce Hailey in subsequent visuals. It was also hard to make Hailey sound Singaporean (scan the cover of this issue to see what we mean).



Kenny
Interviewed Hailey



Vivian
Created her visual identity



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SMART CAMPUS, SMARTER THINKING
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5 REASONS TO COME TO NTU

An education here transcends borders, blending global experiences, diverse learning and innovative campus life, preparing you for a future filled with possibilities

2. UNLEASH YOUR POTENTIAL WITH SCHOLARSHIPS

Scholarships are like the extra boost for go-getters, and NTU has a solid set tailored to different strengths, whether you ace classes, are a budding thespian or own the sports field.

The **Nanyang Scholarship** and the **College Scholarship**, which are bond-free, not only cover tuition but also provide a generous allowance. The **NTU Talent Development Programme** and **Talent Scholarship** recognise and develop non-academic abilities, such as artistic and athletic prowess or a flair for leading community action, with the latter throwing in a handy talent grant along with covering living and accommodation expenses.

1. DREAMS, DEGREES AND DARING JOURNEYS

Want to be a CEO, Chief Data Officer, or in a job that hasn't been invented yet? Get skills that make you stand out in future, whether it's through an innovative double degree programme or a major with minors across diverse disciplines.

Some of the newest programmes include **Data Science and Artificial Intelligence**, **Applied Computing in Finance**, **Chinese Medicine**, and **Artificial Intelligence and Society**, which will nurture ethical and responsible AI specialists. And for those aspiring to be a leader in the accountancy field, the **Accountancy for Future Leaders** programme that integrates sustainability management and analytics will fast-track your path to Chartered Accountant (Singapore) status.

NTU's Premier Scholars Programmes put you on a path that aligns with your professional calling. For example, join the **CN Yang Scholars Programme** to delve into the heady world of research, benefitting from early exposure and ample resources for aspiring scientists.

Opt for the **University Scholars Programme** to broaden your horizons with interdisciplinary courses across sciences, engineering, humanities and social sciences, and become a versatile leader.

If you're aspiring to be a tech trailblazer, your best bet is the **Renaissance Engineering Programme**, where students have a one-year overseas study stint at a renowned partner university, and graduate with a Bachelor of Engineering Science and a Master of Science in Technology Management.

Needy students under NTU scholarships will also receive more aid with a new award that provides additional living, accommodation and overseas allowances.

3. BECAUSE A COSY HOME INSPIRES

Living in a hall is a full-on experience, extending your learning and self-discovery far past the confines of lecture halls. Picture yourself not just as a student but as a culinary enthusiast, experimenting in well-stocked kitchens. Or as a creator tinkering in the innovation garage just a few steps away. Get hands-on with woodworking or nurture your green thumb growing veggies right outside your hall. Every day becomes an opportunity for creativity and learning.

Beyond the walls of your hall room, the campus pulses with a lively social scene. With 16 food courts, over 30 cafes and restaurants, and numerous coffee spots, culinary adventures await food enthusiasts and caffeine lovers alike.

NTU's aesthetic charm adds to the experience. Regularly listed among the world's most beautiful universities, the campus features IG-worthy architecture in a lush environment that's as inspiring as it is educational.

4. SCI-FI LEARNING ADVENTURES

Enter a futuristic landscape where architectural marvels like The Hive and The Arc amp up your learning experience. The adventure begins in high-energy smart classrooms and mega learning studios. Depending on your course, you might find yourself in spaces like the Centre for Augmented & Virtual Reality, a simulated air traffic control tower, or a motion capture studio.

As you wander around campus, you might spot some self-driving buses and see other cutting-edge innovations, since NTU is a testing ground for all things futuristic.

Get ready to dive into the realm of ongoing research and innovation, where you can actively contribute to groundbreaking projects – from developing sweat-powered batteries to designing robotic companions for the elderly.

5. WE TURN BIG IDEAS INTO BIG DEALS

Start at the **NTU Entrepreneurship Academy** – the epicentre of entrepreneurship education. Here, explore minors or second majors in entrepreneurship, grow your network, set the course for seed funding, and embark on internships in startup hotspots like Boston, Shanghai and Copenhagen through the **Overseas Entrepreneurship Programme**.

Go further with the support of makers' labs and design studios, guiding you from brainstorming to prototyping.



Derek

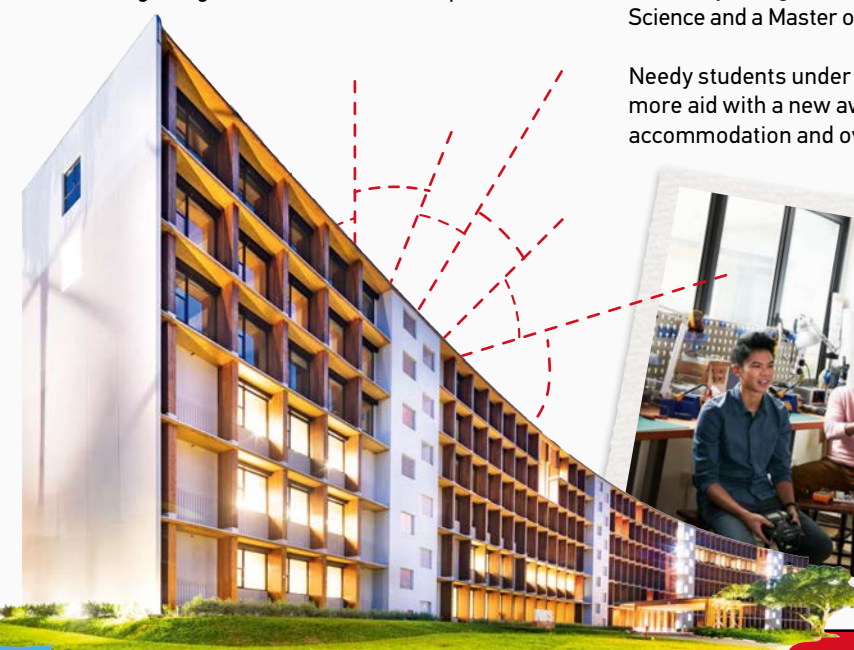
THOUGHTS ON USING AI

How we used AI: ChatGPT was prompted to generate "compelling reasons" to pursue undergraduate studies at NTU for this story.

🗨️ It offered some refreshing angles, like suggesting that NTU has "sci-fi campus vibes". When prompted for headlines and subheadings, it threw up a seemingly inexhaustible list of suggestions.

🗨️ When asked to re-edit some lines for a Gen Z audience, it quickly spit out the text in the right tone.

🗨️ ChatGPT, however, is prone to making unsubstantiated sweeping statements, which meant the lack of useable drafts, even with additional prompting. Its tendency to use colons in titles, even when instructed not to, was slightly annoying. Watch for overused words like "adventure" and "vibrant" and the tendency to start points with "Imagine this" or "Picture this".



SWISS EXCHANGE STUDENT'S PICKS: 5 BEST THINGS ABOUT NTU

University of Bern student Livio Tecchiati's time here was a journey of discovery. We got ChatGPT to assemble his insights, shared in blog entries and an interview, in this listicle about NTU's unique appeal



21-year-old English major Livio Tecchiati spent a semester on exchange in NTU, taking literature and international relations modules.

A difficult goodbye: Livio and his NTU friends had dinner together before he left Singapore.

1. THERE'S A CLUB FOR EVERYTHING

When he arrived at NTU, Livio Tecchiati discovered a mind-boggling array of clubs and activities.

Reflecting on the wide options, he notes: "There are so many clubs to join, and it's not just limited to sports, although the sports clubs, with activities like scuba diving, sailing and wakeboarding, are already impressively varied."

He adds: "Every other week, the University announces new themes like Self-awareness, Earth or Art Week. Students pick a venue and organise engaging programmes complete with booths, live music and free food for anyone interested."

He has also seen students organise themselves in unconventional ways.

"There probably isn't an official club for this, but on one of my evening strolls, I saw around five students with flashlights and buckets picking up giant snails from the sidewalk and relocating them to more secure surroundings."

He adds with a chuckle: "I just assumed it must have been some sort of snail rescue team, like the dedicated student group that cares for the campus cats."

2. NTU'S FORMULA: STUDY HARD, PLAY HARDER

Livio observed that his peers at NTU held themselves to high standards in assignments and exams due to the competitive environment. However, there are upsides to this "hustle culture".

He notes: "The people around you support you to find the best version of yourself."

NTU students aren't just hitting the books; they work hard and play hard. "Most are very determined and busy, eager to find themselves within the academic and social universe of NTU."

He adds: "Every time I passed through the heart of the campus in the evening as I headed home from the library, I would see numerous dance classes in full swing. Students passionately practise the latest K-pop dance moves together until well past midnight."



Visual: DALL-E

The unofficial "snail rescue team" Livio encountered in NTU.

Comparing his time at NTU to his previous semesters at the University of Bern, Livio shares: "Back in Switzerland, my days were primarily centred on studying before heading straight home. But here at NTU, there are so many ways to enrich your hours."

One striking difference is the seamless integration of an individual's school and personal life at NTU. "Exchange students like me notice that at our home universities, social and academic aspects exist independently. Yet, here at NTU, they seem to come together," he explains.

3. THE 24/7 CAMPUS LIFE

"Even at 3am or 4am, there's a lively scene with students jogging or working out at the open-space gym," says Livio. According to him, it's not unusual to see students enjoying late-night snacks and leisurely strolls. Safety is a priority, Livio observes. "Even my female friends from home felt secure here, so we sometimes went for midnight walks."

4. FRIENDSHIPS THAT GO THE EXTRA MILE

Livio's time at NTU was made brighter by the warm friendships he built. These connections thrived in Literature classes, group projects and unexpected moments like a terrarium workshop or hanging out with his neighbours from Hall 12.

Initially grappling with Singlish, Livio grew fascinated by it and even began to adopt its words and intonations. He cherishes memories of his friends' playful Singlish jokes, incorporating phrases like "Aiyoh," "Eh," and "Huat," which he now misses.

"My friends even gave me amusing nicknames like 'Mr Worldwide' or, my

personal favourite, 'Our White Bread Friend'."

His pals also introduced him to various places in Singapore, from scenic Sentosa to cinemas, museums and restaurants. Another friendship opened the door to food excursions across the causeway, while his Hall 12 neighbours organised an unforgettable trip to Malaysia, where Livio had his first spa massage.

5. YOU'LL GET OUT OF YOUR COMFORT ZONE

"Studying in Singapore inspired me to seek a more diverse work-life balance back home," reflects Livio. At NTU, he had seen how students effortlessly mesh their educational pursuits with their hobbies, sports and other interests, thanks to the University's vibrant campus culture.

"The dance groups stood out the most as they always looked like they had a lot of fun, and so I decided to join a dance club this semester."

At University of Bern, Livio and a friend have started taking dance classes, tackling waltzes and cha-chas each week.

His transformative time at NTU has fuelled his desire to be more engaged in his school's activities.

Even his dream of pursuing a Master's degree abroad has gained traction as he is now more open to new experiences.

Here's a fun tidbit: you'll always find a jar of kaya in his fridge, serving as a delicious memento of his time at NTU.

THOUGHTS ON USING AI

How we used AI: ChatGPT was fed Livio's blogposts on NTU and an interview transcript (from a chat with him after he had left Singapore), and prompted to generate the listicle from an exchange student's perspective.



Zi Jie

☹️: ChatGPT does not quote verbatim from an uploaded PDF, likely to prevent plagiarism; you'll have to rework the quotes that you do not want edited. ChatGPT is also quite adept at streamlining clumsy phrases, although you will not agree with all its edits.

☹️: Just like us humans, ChatGPT doesn't fire on all cylinders 100% of the time, and we didn't like the way it edited some things. It would also ignore simple, direct prompts once in a while.



Photo: @shanyin_xy

HIDDEN HABITATS: A CAMPUS WILDLIFE SPOTTER'S GUIDE

Experience NTU's varied wildlife and try your luck spotting these creatures on campus



Source of map information and 2D illustrations: Asst Prof Perrine Hamel, research assistant Noelle Ong and NTU student Zachary Chong from the Asian School of the Environment

1 SPOTTED WOOD OWL

The spotted wood owl, a nocturnal wonder with haunting calls, excels at blending into the woods. These owls have been sighted at Tamarind Hall and near the School of Art, Design & Media. To increase your chances of spotting them, head out during the serene moments of dawn or dusk. Direct your attention to tree branches and listen for their unique calls. Encountering them is a captivating experience.

SPOTTING DIFFICULTY: 3/5

2 ORIENTAL DWARF KINGFISHER

The oriental dwarf kingfisher is a stunning bird with neon-bright plumage. As a migratory species, it poses a delightful challenge for birdwatchers hoping to catch sight of it. Surprisingly, this tiny bird roughly the size of a sparrow has been spotted at NTU, including the North Spine and the School of Art, Design & Media. Keep an eye out for it near water bodies during its prime hunting times in the early mornings or late afternoons.

SPOTTING DIFFICULTY: 4/5

3 COMMON PALM CIVET

The common palm civet, a shy nocturnal creature, has been spotted near Hall 6 and Canteen 2. It is omnivorous, aiding in seed dispersal and enriching our ecosystem. Typically found in quiet, leafy spots near food sources, civets are timid by nature. If you encounter one, maintain your distance, minimise noise and move slowly to avoid startling it.

SPOTTING DIFFICULTY: 2/5



HEY!
AR
SCAN THIS VISUAL
for a close encounter
with the elusive
spotted wood
owl

4 SMOOTH-COATED OTTER

The smooth-coated otters are the playful stars of our campus waterways. These endearing Singapore natives are now regulars at Nanyang Lake and the pond at Crescent and Pioneer Halls, delighting everyone with their aquatic antics and strong family ties. Skilled hunters, they have a diverse diet that includes fish. If you happen to spot them during a morning or evening stroll, enjoy the moment from a respectful distance.

SPOTTING DIFFICULTY: 2/5

5 WILD BOAR

Coming across a wild boar on campus might be surprising, but there's no need to worry; these creatures coexist peacefully with humans if left undisturbed. They have also been seen near Hall 9 and the Jalan Bahar entrance. If you come across one, remain calm, give it space, and retreat slowly without sudden movements or loud noises. The next time you encounter a boar family, just remember they're fellow campus dwellers, peacefully navigating their own boar business.

SPOTTING DIFFICULTY: 2/5



HEY!
AR
SCAN THIS VISUAL
to safely approach
a wild boar
piglet

WILDLIFE HOTSPOTS

- 1 Spotted wood owl
- 2 Oriental dwarf kingfisher
- 3 Common palm civet
- 4 Smooth-coated otter
- 5 Wild boar
- 6 Paradise tree snake
- 7 Crimson dropping
- 8 Little bronze cuckoo
- 9 Large-tailed nightjar
- 10 Bronze flutterer
- 11 Red-breasted parakeet
- 12 Huntsman spider
- 13 Oriental whip snake
- 14 Plantain squirrel
- 15 Lesser dog-faced fruit bat
- 16 Asian emerald dove
- 17 Common birdwing
- 18 Straw-headed bulbul
- 19 Changeable hawk-eagle
- 20 Atlas moth
- 21 Malaysian pied fantail

6 PARADISE TREE SNAKE

The paradise tree snake is known for its exceptional gliding abilities and vibrant patterns.

Commonly found near foliage, it was also recently seen in the vicinity of Hall 15. Generally harmless to humans, this mildly venomous snake mainly preys on small lizards and frogs. You're more likely to catch a glimpse of one during the warmer parts of the day. Keep a safe distance and move slowly as you observe this captivating reptile gracefully navigate its natural campus habitat.

SPOTTING DIFFICULTY: 3/5



HEY!
AR
SCAN THIS VISUAL
to bring a
smooth-coated otter
into your space

FAUNA SPECIES RECORDED
ON CAMPUS AS OF ACADEMIC
YEAR 2022/23

28

DRAGONFLIES &
DAMSELFLIES

22

BEES & WASPS

20

REPTILES

10

MAMMALS

24

SPIDERS

90

BUTTERFLIES

139

BIRDS

*The wildlife sightings in this story were reported in the Earthlink NTU Nature Watch Telegram chat group and include other anecdotal accounts.

THOUGHTS ON USING AI

How we used AI:
ChatGPT did basic research on wildlife and edited snippets put together based on the findings and other information sources.



Jurnn

☀️: ChatGPT can almost instantaneously provide multiple ways of editing a line or paragraph, which can be handy.

☀️: Inaccuracies kept cropping up – the oriental dwarf kingfisher was described as having “lush green” in its plumage while the paradise tree snake was described as “not venomous” when in fact it is mildly venomous. All 3D visuals for this story had to be generated the usual way – with support from a digital artist – as AI lacks the relevant capabilities.

NTU OR NOT? QUESTIONS YOU’VE LEFT UNASKED... UNTIL NOW

Considering NTU for higher education? We asked AI for a list of burning questions you may be too shy to voice out. Get the answers straight from NTU students and the university admissions team here

Q2.

Any seniors into eco-warrior stuff? How committed is NTU to sustainability, both in the campus operations and academics? Want to know if they walk the talk.

NTU is BIG on sustainability. Our campus itself is a green marvel: We’ve got eight zero-energy buildings, the most among universities here. Among these, Gaia stands out as the largest wooden building in Asia.

Every undergraduate must take a sustainability core module. If you want to go deeper, you can add on a second major or minor in sustainability.

I’ve noticed a trend of students using their own reusable lunchboxes for takeout, instead of relying on single-use plastic containers. In my scholarship interviews, I was quizzed on sustainability and the environment. On the academic front, we do many things on digital platforms, whether it’s learning, submitting assignments or taking exams – so we rely less on paper and pen.

Angeline Wong, Year 1, double degree in Accountancy & Business, University Scholars Programme

HEY! INSIDER

Lester Hio + ChatGPT

Q1.

Hey, I’m thinking of applying to NTU. Anyone knows if they have alternative assessment methods or unique criteria for admission? I wonder if NTU values creativity and unconventional achievements.

NTU doesn’t just look at your grades; you’re valued as an individual. Through aptitude-based admissions, your passions, interests and strengths are taken into account.

If you’ve got some outstanding talent or can highlight achievements outside typical school activities relevant to the programme you are applying for, this could be your ticket to NTU. For example, you might have led community service projects or started an online business. Your aptitude and passion can also shine through in sporting and internship achievements.

Be prepared to submit an essay of not more than 500 words and feedback from at least one appraiser, like a former coach, tutor or community leader.

In fact, you may want to try for the **NTU Talent Scholarship**, which recognises students’ outstanding non-academic accomplishments and where good grades are not a requirement.



Q3. Any idea if it's feasible to get into cutting-edge research as an undergrad at NTU? Any secret paths to collaborate with profs?

If you want to dive deep into research in university, check out NTU's **Undergraduate Research Experience on Campus (URECA)** programme, available in your second or third year.

You'll get to team up with faculty mentors in your chosen field, make your mark by publishing in reputable international journals, and soak up invaluable research experience, including taking part in overseas competitions and conferences. Ever dreamt of becoming the first author of a research paper in a prestigious journal? NTU students have achieved that feat.

Moreover, you have the chance to earn a URECA certificate of achievement, carrying the title of "NTU President Research Scholar".

URECA could pave the way for a research career. In fact, around one-third of URECA students go on to pursue postgraduate studies at NTU and elsewhere.

Q4. How on point are NTU's career services in connecting us with internships and jobs? Any industry partnerships for job opportunities? Thinking about my future.

At NTU, every student is required to complete at least one internship, and there's access to an impressive network of employers cultivated over the past decades, from renowned MNCs and local conglomerates to smaller companies and government agencies.

We know your future is global, so there are opportunities for overseas internships, allowing you to work and study abroad, do research internships at prestigious laboratories, or intern at overseas startups, and more.

Every year, nearly a third of NTU students get permanent job offers at the end of their internship stints.

As career coaches, including alumni mentors, guide you, take part in employability skills workshops, industry-specific consultations, company visits and networking sessions. NTU's large career fairs are also crucial touchpoints with the working world.

Q5. Hi, can you share your experiences with hall life at NTU? What's the vibe like on campus?

I'm really enjoying living in Pioneer Hall. There's always something happening – not too long ago we had a spooky Halloween celebration and the adrenaline-fuelled inter-hall games. Kudos to the students in our hall committees who pour their heart and soul into creating a fun and friendly atmosphere for us!

Abdul Haque, Year 1, Medicine

Q6. Seniors, share your post-grad tales! NTU employment rates? Curious about my future prospects.

In the latest employment graduate survey, more than nine in 10 NTU graduates secured full-time jobs within four months of getting their degrees.

The Class of 2022 also earned higher salaries compared to the previous cohort. Notably, NTU's Data Science and Artificial Intelligence graduates topped the charts with a mean gross monthly salary of \$6,749, while those who completed the double degree in Business and Computer Engineering/ Computing drew a mean gross monthly salary of \$6,627. Graduates from the double degree programme in Accountancy and Business earned a mean gross monthly salary of \$5,580.

There's even a centre dedicated to helping you shine in the job market – the Margaret Lien Centre for Professional Success.

Q7. Any examples of integrating practical skills into the curriculum? Keen to learn more.

In project work, students tackle real-world problems contributed by industry partners. But that's not all – there are frequent guest lectures by industry leaders, and you can take part in case competitions and hackathons to sharpen your problem-solving, pitching and analytical skills.

Take note of NTU's **Work-Study Degree** pathway, accessible after the second year of studies. This allows you to be attached to a specific company for up to 18 months of on-the-job training, and you might even secure a job offer upon graduation.

Q8. I'm a bit shy, especially in new places. Any tips on smoothly transitioning into NTU life? Are there friend-making support systems I can tap?

Totally go for orientation. There's usually one hosted by your school, but there are also orientation activities organised by the halls of residence and clubs like the Cultural Activities Club, Sports Club and Students' Union. These programmes usually run consecutively, so you can join a few if you want to. It's the easiest way to make friends since everyone's in the same boat and ready to mingle.

Matin Mahmood, Year 1, Maritime Studies

You'll be spoilt for choice on things to do here. Whether you decide to join a jam band, go for night cycling organised by your hall, or become a part of NTU-wide clubs like the Welfare Services Club, you're bound to meet people who share your interests. Don't worry, you'll find your tribe.

Meg-Gayle Dean, Year 2, Communication Studies

THOUGHTS ON USING AI

How we used AI:

We asked ChatGPT to generate "commonly-asked questions" from students contemplating university applications, presented in a Reddit-style format. Real individuals from NTU then provided responses to these questions.

☺: ChatGPT was able to suggest some good questions, including a couple that weren't on our radar.

☺: Its idea of a casual tone quickly became quite predictable – it was especially fond of prefacing a sentence with "Here's the scoop", "Check this out!" and "Listen up".



Lester H



HALL LIFE: 3 REASONS TO JUMP IN

Dive into a world where dance, cheerleading and sports aren't just activities, but pathways to unforgettable experiences and lasting friendships in hall

Photo: Loh Zi Yan and Amanda Goh



HEY!
AR
SCAN THIS PHOTO
to experience the energy of these high-flyers

1 Elevate your uni experience with cheerleading

After a three-year break due to the COVID-19 pandemic restrictions, hall cheerleading made a sensational comeback last September, uniting students across different NTU halls of residence and turning former rivals into allies.

This teamwork was evident in the Inter-Hall Cheerleading Showcase, where students from various halls combined forces to create breathtaking performances. Guided by committed alumni coaches, the hall cheerleaders developed the skills and strength needed to perform gravity-defying stunts.

Even though the showcase did not pit teams against one another for prizes, the students dedicated blood, sweat and tears to craft endurance-fuelled routines months before the show.

Third-year Mechanical Engineering student Devin Kaluarachchi, a cheerleader from Team Aura – a collaboration between Hall 1 (Unisus), Hall 2 (Awesomes) and Hall 8 (Royals) – describes the sport as a mix of stunts, tumbling and dance that encourages athletes to go beyond their usual limits. "We trained for three hours a day, twice a week," he notes.

Reflecting on the strong team spirit within Aura, he adds that when someone hits a stunt, the whole team claps to celebrate the achievement. "Ending each training with our

cheer-off tradition really boosts our team morale," he says.

Photo: @theplainphotographer



HEY!
AR
SCAN THIS PHOTO
to get in sync with the dancers' rhythm

2 Dance the night away

Hall dancers at NTU are a distinctive presence on campus. Decked out in comfy oversized tees and loose joggers, they can be spotted anywhere in NTU, seeking out reflective surfaces to finetune their dance moves.

Their love of the craft was evident at the Hall Olympiad Closing Ceremony, the grand finale of NTU's annual inter-hall games. The event functions as a competition, where 22 hall dance teams go head-to-head.

Elya Ghazali, a third-year Nanyang Business School student and member of Tamarind Hall's dance team, Tamada, recalls: "At first, we were a bit uncertain about whether we could pull off our dance."

However, the team tapped feedback from professional dance instructors, which boosted their confidence. On stage, the dancers showcased meticulously rehearsed performances.

But it's not just about the routines. Kyllie Young, a second-year student at the Lee Kong Chian School of Medicine and member of Pioneer Hall's PARAD18M, reflects on his journey: "Our performance marked months of hard work. It was truly an emotional experience."

He adds: "PARAD18M helped me grow as a new dancer and become part of a community that's given me my fondest hall memories."

3 Champion the sporting spirit

Building on our strong sports tradition, Team NTU is the 2023/24 champion of The Singapore University Games. Among others, NTU's aquathlon, squash, bowling and floorball teams are proud winners in the mega sports event, where students from seven local universities compete in various categories.

The NTU Women's Basketball team proudly boasts a 14-year reign as defending champions, while the men's basketball team has impressively upheld their champion title for three consecutive years.

For these athletes, the proximity of halls to training venues is a game-changer.

Mindy Peck, a first-year Maritime Studies student and member of the NTU Women's Basketball team, says: "I'm thankful for my hall's convenient location, just 10 minutes away from the NTU Sports & Recreation Centre and The Wave."

With rigorous training sessions often held late into the night, the halls offer an essential space for athletes to rest and recover. Some of the halls have gyms that make strength and endurance training convenient.

"Hall life is definitely an experience all university students should have. It is a unique opportunity to live among friends," says Lim Jing Jie, a first-year Electrical & Electronic Engineering and Economics student who is with the NTU Men's Basketball team.

THOUGHTS ON USING AI

How we used AI:

We gave ChatGPT raw parts of this story to edit and put together, and provided text examples with the desired style and approach for the AI to mimic.



Shu Yi

☀️: ChatGPT is best used for the initial and final stages of writing. In the brainstorming phase, it offered some good ideas. It's a handy proofreader to check grammar and spelling.

☀️: While it can edit paragraphs, ChatGPT can't build a cohesive story. It struggled to incorporate new information and transitions. Human intervention was needed to make this story flow better.



Photo: Ng Le Yang

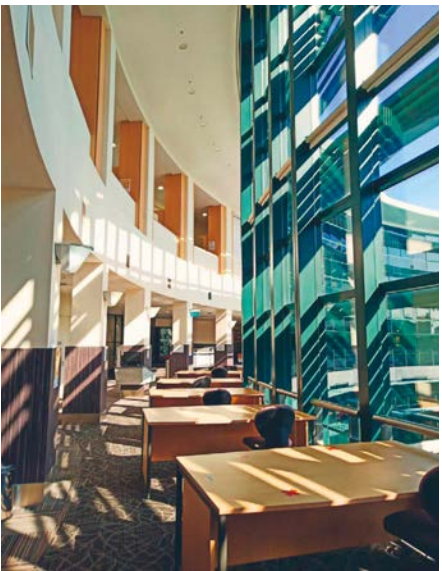
The NTU Men's Basketball team are champions on the court.

UNI-QUE SPACES

Discover a captivating blend of architectural styles at NTU – where tradition and innovation harmoniously coexist



At The Arc, you'll orbit in style.



Take a seat at this library, where you can read between the lines.



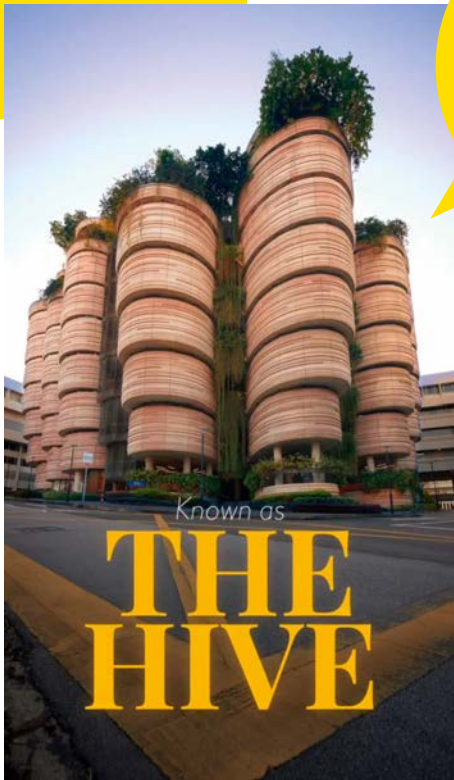
Artistic ascent: Where the sky's the limit.



Come to NTU's art school for strokes of brilliance and shades of inspiration.

The Hive: Where NTU's buzzing minds converge and create.

SCAN THIS VISUAL



SCAN THIS VISUAL

Legacy in bloom.



HEY!
AR
SCAN THIS VISUAL
to make a beeline
for this learning
hub

Mirror a sustainable lifestyle.



PeiFang

THOUGHTS ON USING AI

How we used AI: We tested ChatGPT's ability to "read" photos and caption them in our usual house style.

🗨️: Creative captions came fast and furious, but these were often flowery and did not make much sense. Some phrases reappeared too often and prompting was needed to stop the use of exclamation marks. ChatGPT offered refreshing perspectives that made editing captions more productive at times.

🗨️: ChatGPT could identify some obvious elements in the photos such as pink flowers in the one of the Chinese Heritage Centre, but it couldn't identify exact locations. It often failed to see textures other than glass surfaces. Extensive prompting was needed to turn empty word play into meaningful or relatable captions that went beyond merely describing facades.

🗨️: Word counts and requests to use sentence case were ignored.

TOMORROWLAND

How NTU's homegrown technologies are reshaping our future

NTU's insect innovators: Tomorrow's lifesavers

NOW

At NTU, things are getting a little buggy, but in the coolest way possible. Prof Hirotaka Sato and his squad have literally given life to cyborg cockroaches. Forget superheroes; these tiny critters are the real deal. Decked out with sensors and transmitters, they're training to weave through earthquake debris like pros, all for search and rescue. These bugs will not just wander aimlessly; they'll be on a mission to find survivors and ping back their locations – talk about being seriously tech-savvy.



FUTURE

These robo-roaches could be the MVPs of rescue missions. Picture this: a swarm of these tech-infused insects, with next-level sensors and teamwork that would put your group project to shame, diving into spots where even the bravest rescuers can't reach. They might soon be doing more than just saving lives; think environmental monitoring or even zipping around in space. NTU isn't just playing with bugs – it's redefining the future of rescue and exploration, one cyborg cockroach at a time. Get ready, because it's about to get insect-intense! 🐜🔬

Plucky power in feathered fuel cells

NOW

NTU and ETH Zurich are pioneering the conversion of chicken feathers into a thin, proton-conducting membrane. This isn't just an unusual experiment; it's a stride towards eco-friendly innovation, transforming poultry byproducts into valuable resources.

FUTURE

Envision chicken feathers as key players in reducing toxic chemicals and minimising carbon footprints. With NTU and ETH Zurich's cutting-edge research, these common feathers are set to emerge as a significant resource for sustainable bioproducts. A future rich in feather-derived solutions is on the horizon.



Heal in 3D print style

NOW

NTU and the Singapore General Hospital have joined forces to revolutionise medical tech with their new 3D printing lab. In the works are custom prostheses and bone implants that will provide medical breakthroughs for patients. The future of personalised medicine is being crafted, layer by layer.

FUTURE

Healthcare will mirror the wonders of science fiction. From bioprinting living tissues to crafting specific metal implants for complex surgeries, this collaboration will redefine patient care. With this leap towards tailored health solutions, there will be a new era of bespoke medical miracles.



Lester K

THOUGHTS ON USING AI

How we used AI: ChatGPT turned factual descriptions of NTU technologies into engaging snippets; DALL-E produced visuals of the future scenarios based on specific keywords.

🗣️: When prompted, ChatGPT expertly created both the NOW and FUTURE scenarios for this story based on short descriptions of the existing technologies.

🗣️: However, up to 10 rounds of prompting were needed to create each visual; for instance, prompting DALL-E for a “cute cyborg roach” resulted in intimidating, larger-than-life roach-terminators, while the response to a request for a tub filled with chicken feathers was a vat full of chickens. When prompting AI for visuals, it helps to be as specific as possible – set the scene and the camera angle, detail the action, and decide which objects should be in the foreground or background, like how a director of photography on a film set would.

FYI

SCENE

+ HEARD



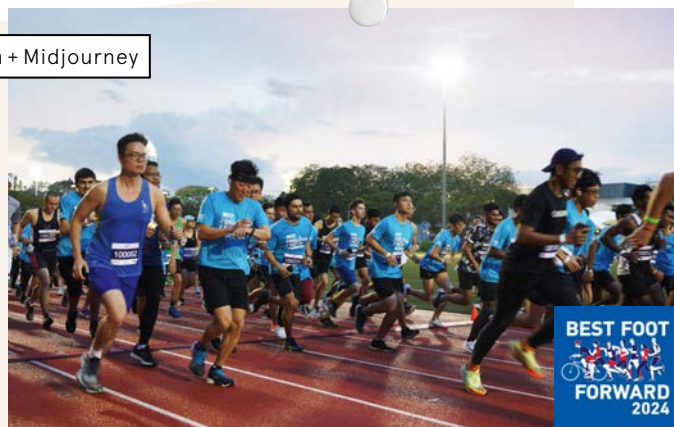
"The world is still sorely lacking the progress that is needed to limit global temperature rise to 1.5°C. To meet this target, we need to cut emissions by 43% and ramp up renewables production three times and energy efficiency two times by 2030."

– Naeem Nadzri, an NTU PhD student studying water purification technology. He was one of the 20 youth delegates who represented Singapore at COP28, the United Nations climate meeting held in Dubai last December



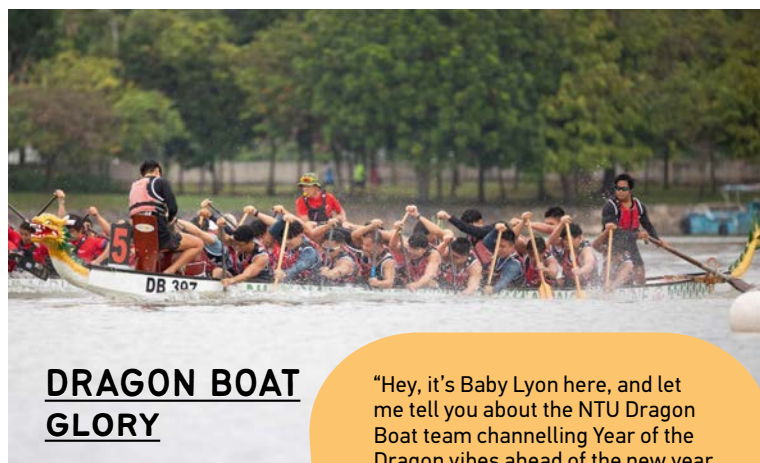
HEY!'s ARsome win

HEY! bagged the Distinction Award for Best Use of Technology at the Institute of Public Relations of Singapore (IPRS) PRISM Awards 2023. The standout move? Using augmented reality across the magazine's platforms to liven things up. This win is as much yours as it is ours. Thank you, readers, and we look forward to more ARsome adventures with you.



Fitness for a cause

Get set to hit the ground running at Best Foot Forward, or BFF, which flags off with the "X Campus Run" at The Wave on 2 February. It marks the start of the third We Belong campaign that draws on the impact of collective action. As part of BFF, virtual challenges – where you can run, walk or cycle – extend until 5 April. So round up your BFFs and let's stay fit while making a positive impact together. You'll be doing your part for the NTU Bursary and School Advancement Funds.



DRAGON BOAT GLORY

"Hey, it's Baby Lyon here, and let me tell you about the NTU Dragon Boat team channelling Year of the Dragon vibes ahead of the new year. Big cheers to them for snagging victories in not one, but two categories at the Singapore Regatta Waterfest 2023 – the DB22 Tertiary Open and DB12 Tertiary Women. And the Men's dragon boaters were named Sports Team of the Year at the NTU Sports Awards Ceremony in December. Our paddlers are making waves, and I couldn't be prouder of them and all the other hardworking NTU athletes. Ready to roar into the Year of the Dragon!"



BREATH OF FRESH IDEAS

Ready to spark your creativity? Venture outdoors to places like Yunnan Garden. NTU researchers have found that less-than-optimal indoor air quality affects creativity. Even within safe air quality levels, any decline can put a damper on our originality. Step outside for a breath of fresh air and watch those creative juices flow.

HEY! AR
SCAN THIS PHOTO
to look back at HRH Prince William's visit

Royal revelation

NTU left His Royal Highness Prince William thoroughly impressed during his visit to the EcoLabs Centre of Innovation for Energy last November. "You've blown my mind," he exclaimed, surprised by a startup that had sent a satellite with a plasma thruster – a bold new type of fuel-efficient engine – into orbit. He seemed similarly impressed by the other disruptive innovations showcased by startups incubated at the labs during his tour.



The minds behind Talking Typefaces – Seth Low, Philip Ong and Vernice Chua. Seth and Philip were in the cohort that travelled to the Cannes Lions International Festival of Creativity in 2022 as part of their advertising module.

Font-tastic victory: Talking typefaces

What if the blind could experience typography the way we do? Fonts evoke certain moods and emotions. With "Talking Typefaces", a trio of communication students proposed using artificial intelligence to pair Google fonts with distinct voices, which would enhance text-to-speech with varied tones. This innovative concept clinched two Golds and Best of Show at the Crowbar Awards, a major competition for young creatives. Other NTU teams, comprising Communication Studies, as well as Art, Design & Media students, also excelled, with one other team securing a Gold award.

THOUGHTS ON USING AI

How we used ChatGPT: It played copywriter for each snippet here.

Derek



Vivian

How we used Midjourney:

It generated the images of Baby Lyon in a dragon costume and the student painting in its visualisation of Yunnan Garden. Images of Baby Lyon created by us were fed to Midjourney with a request to put it in a dragon costume. Similarly, photos of Yunnan Garden taken by us were provided for reference when we asked for an interpretation of the landmark.

👉: To our amazement, Midjourney let us toggle the level of influence the reference images had on the visuals it generated.

👉: However, it also sometimes generated gibberish and weird logos, such as in the images of Lyon wearing the dragon costume. We worked around this by removing text like "NTU" from the reference images.



Dr Vivien Chiong
Chief Editor, HEY!

AI'VE GOT NEWS FOR YOU

Fascinated by how artificial intelligence (AI) is permeating every field, we wanted to create a special AI issue of HEY!.

We wanted to understand the potential, limitations and ethical considerations of using AI in communication.

Could we produce HEY!, a student magazine, using AI?

Starting with the cover, we used generative AI to create Hailey, a hyper-realistic persona, as our cover talent. She then transforms seamlessly from the print cover into an augmented reality video.

We characterised her on ChatGPT so that she could answer questions for her cover story interview.

We experimented using AI in copyediting, drafting headlines and captions, writing stories from interview transcripts, and generating photos and illustrations.

We learnt that ChatGPT was good for generating ideas. But fact-checking by humans is still an essential step. As ChatGPT operates on data commonly out there, could it pass off some misinformation as fact if enough people repeat the same thing? Can we help to train it to correct factual errors?

We saw its limitations. It can ignore the most specific prompts, it has a tendency to use certain phrases, and its stories sometimes don't flow well.

Still, we are excited by the potential of AI. HEY! is the University's brand journalism project where we experiment with emerging technologies to tell stories for and about NTU's students. HEY! has transformed over the years from being an iPad publication to one that uses only smartphone photography even on its cover, to an augmented reality magazine with features like 3D models and 3D animation, and now we have co-created this entire issue with AI.

This issue shines a spotlight on how AI is being developed, taught and applied across disciplines at NTU, from engineering to traditional Chinese medicine and various creative projects.

The questions raised about AI are pertinent to fellow content creators and university students who generate content daily, be it for essays or projects.

Generative AI is widely discussed globally, and the Singapore government is developing a new AI governance framework. One of the challenges posed by AI is that it has become so proficient it is now difficult to distinguish between the real and the artificial. We have thus marked all images of Hailey with a "stamp" indicating she is AI-generated, and every story in this issue has comments on how AI was used in it.

Hailey is our first experiment at creating a hyper-realistic persona using AI. We are thinking about introducing other personas to reflect the diversity on the NTU campus. Tell us what you think of this.

The HEY! team hopes you like our experiment and will be inspired perhaps to explore further in your studies. If you already have and would like to share what you've done, drop us a line at hey@ntu.edu.sg.

Thank you for joining us on this exciting exploration of the frontiers of creativity.

Unleash flawless

HEY!

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