The inaugural Singapore 100 Women in Tech list recognises outstanding individuals who have made significant contributions to the country's technology sector. PHOTO: INFOCOMM MEDIA DEVELOPMENT AUTHORITY

WOMEN with the IT factor

Three women aged below 35, none of whom would fit the bill of a traditional IT specialist, made it onto the inaugural SG 100 Women in Tech list released in September. The Straits Times looks at how they are making waves in the tech sector.

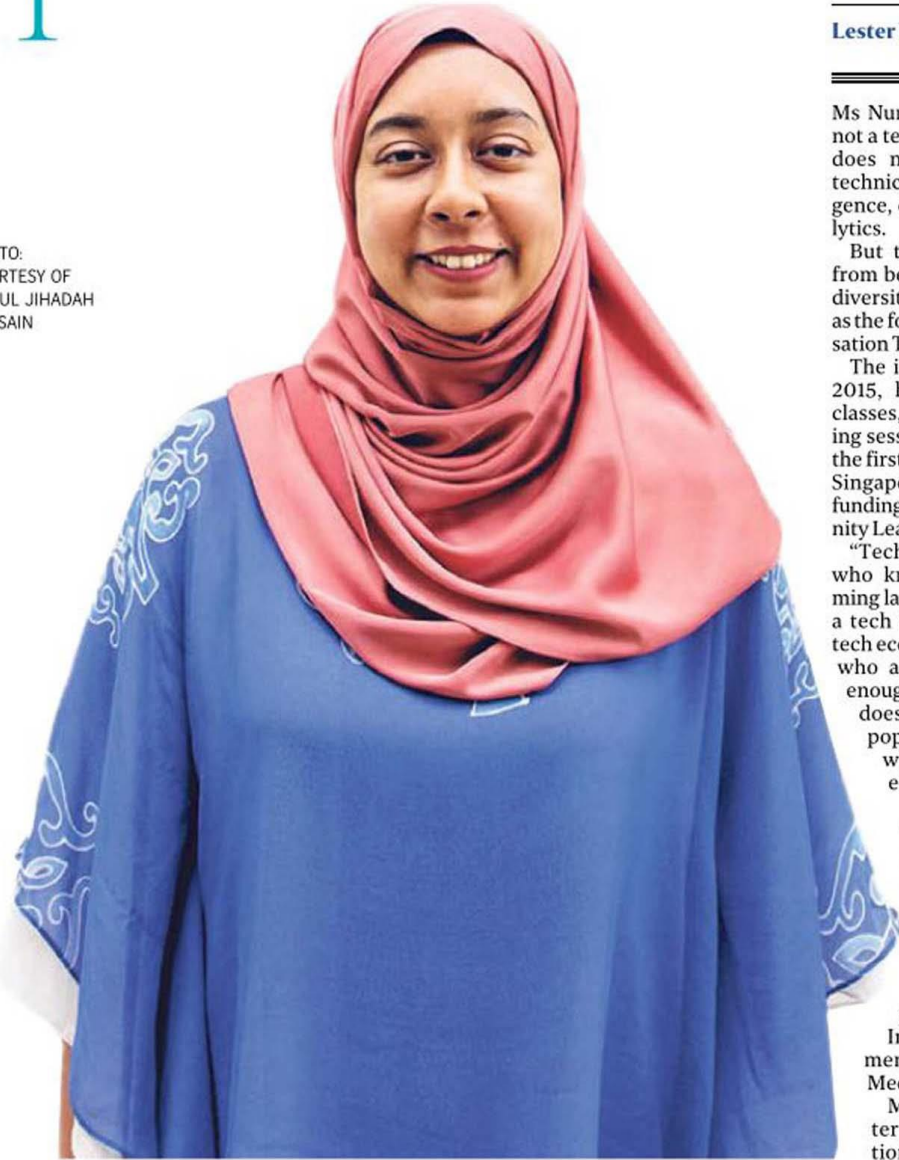# 1 Championing gender diversity in tech industry

PHOTO: COURTESY OF NURUL JIHADAH HUSSAIN

Lester Wong

Ms Nurul Jihadah Hussain, 33, is not a technology professional, and does not command in-demand technical skills in artificial intelligence, cyber security or data analytics.

But that has not stopped her from being a champion of gender diversity in the technology sector as the founder of non-profit organisation The Codette Project.

The initiative, which started in 2015, has organised dozens of classes, workshops and networking sessions for women, as well as the first women-only hackathon in Singapore. It has also received funding under Facebook's Community Leadership Programme.

"Tech users aren't just people who know Python (a programming language). Everyone today is a tech user, and if we have only tech ecosystems created by people who are considered tech-savvy enough, then that fundamentally does not serve the rest of the population," said Ms Nurul, who has a full-time job in the education sector.

In September, 100 women in Singapore's technology sector were honoured at the Singapore Women In Tech webinar.

The list was compiled by the Singapore Computer Society in partnership with the Infocomm Media Development Authority (IMDA) and Mediacorp.

Ms Nurul, who holds a Master of Business Administration degree from Singapore Management University, was among those named.

She said some of The Codette Project's most popular classes involve teaching female business owners skills that do not require technical expertise, such as how to better use Facebook or Instagram for digital marketing.

When asked how the gender gap in Singapore's infocommunications and technology sector can be narrowed, Ms Nurul said the key is to give more women the access and opportunities they need to succeed – for example, with events like The Codette Project's second women-only hackathon last year, which drew 100 participants and had a waiting list.

Hackathons are collaborative events where programmers get together to work on a project within a short timeframe, typically on an overnight basis and lasting upwards of 24 hours.

"We thought about what would make it easy for women to attend," said Ms Nurul, who started The Codette Project to help underprivileged minority women but realised that there was a lot of interest in tech.

"If I'm a caregiver with a child, is there child-minding? Is there a breastfeeding or prayer room? Do people have vegetarian or halal food? These are all things we provided (at the hackathon)."

The biggest responsibility in setting up an environment where women can succeed lies with the companies, Ms Nurul said.

"The perspectives of the people who did tech in school, and those who did not, have been equally valuable in building this community," she added.

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DIVERSITY NEEDED

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MS NURUL JIHADAH HUSSAIN

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Always game for new challenges

ST PHOTO:
ONG WEE JIN

Within five years, an indefatigable willingness to try new things has taken Ms Rika Lim, 29, from the bottom rung of the gaming industry to being a mentor and role model for women in the technology industry.

In 2015, wanting to try her hand at a design-oriented role in game development, she applied for an environmental artist position at French gaming firm Ubisoft's Singapore arm.

She did not get that job, but was offered another role – as a level designer.

"Level design is a very specialised role and I had always had the thought of being able to focus on something in my work," said Ms Lim (left), who previously studied game design at the DigiPen Institute of Technology. "So I took the opportunity and, in the end, it worked out because I also managed to work on a lot of hands-on stuff."

WOMEN STEPPING UP

> I've been trying to help (my colleague) by sharing the material from training sessions I attend, for example... I feel like we are slowly getting to the point where ladies are stepping up and showing what they're really capable of.

MS RIKA LIM, who has seen more of her peers beginning to move into managerial roles.

Level designers can be thought of as the landscapers of the gaming industry, responsible for arranging the different visual elements in a game's three-dimensional environment so that each can thrive and contribute to a quality experience for the player.

It was a role that Ms Lim found she could excel in, and she has since worked on several entries in Ubisoft's flagship Assassin's Creed franchise, including the latest instalment, Assassin's Creed Valhalla, which was released last month.

Two years ago, she was asked if she wanted to make the step up to lead the team of level designers she was part of.

"That wasn't something that had crossed my mind then, but I thought, 'Life is about trying new things and seeing how it flows and works for you,'" she said.

"The company allowed me to ease into the job and provided me with a lot of training for things like how to manage the team so that each of them gets the chance to build his or her profile up as well."

She now oversees about 15 level designers working in three Ubisoft studios – in Singapore, Chengdu and Santa Rosa in the Philippines.

Of these, only two are women.

According to market research portal Statista, women make up about a quarter of the global gaming industry's workforce.

Ms Lim said she has not had to go out of her way to prove herself in the male-dominated environment, and has received much guidance from more experienced colleagues.

This has influenced one of her female team members to aspire towards being a team lead, while more of her peers are beginning to move into managerial roles.

"I've been trying to help (my colleague) by sharing the material from training sessions I attend, for example," said Ms Lim.

"I don't see it as me leading and her following, because we're both working towards the same goal.

"I feel like we are slowly getting to the point where ladies are stepping up and showing what they're really capable of.

Lester Wong

The SG 100 Women in Tech list

The inaugural SG 100 Women in Tech list was launched in September to honour outstanding women in Singapore's technology sector.

It was compiled by the Singapore Computer Society in partnership with the Infocomm Media Development Authority (IMDA) and Mediacorp.

The 100 women were selected from more than 850 nominations and comprise professionals from the public and private sectors as well as academia. They include Razer chief of staff and board member Patricia Liu, Nanyang Technological University associate professor of bioengineering Sierin Lim and ComfortDelGro chief technology officer Siew Yim Cheng.

Manpower Minister Josephine Teo is the patron of the Singapore Women in Tech movement, an IMDA initiative to attract women into the infocommunications and technology sector. The movement has brought together over 600 women in the workforce for networking and mentoring activities.

Women account for about 30 per cent of the workforce in the infocomm and technology sector. At the Singapore Women In Tech event in September, the call went out for more to join the sector.

Lester Wong

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Switch to tech sector fits her like a glove

Before she founded digital marketing start-up QuickDesk in 2014, Ms Charmain Tan, 31, was selling winter gloves.

That business, which she started when she was 21, was then in the process of winding up, and she was thinking about what to do with the lessons learnt from being a first-time business owner.

Managing physical inventory was tough, she said, and so was dealing with occasions when the company got its estimates wrong and had to throw stock and material away.

"There was a lot of wastage. So I thought of moving to something much more agile, such as software," added Ms Tan (right).

"The second thing was – demand for winter gloves is seasonal. As an entrepreneur, I was thinking of my own pain points and, to me, a sales solution is always a need."

Ms Tan studied statistics at the National University of Singapore, but works with colleagues with expertise in various technical areas such as e-mail automation and cloud communications.

QuickDesk, which has a team of 11 including Ms Tan, is her first foray into the technology sector.

The company started out with selling its customer relationship management (CRM) software platform, offered on a subscription basis. A CRM platform typically stores and manages customer information, tracks follow-up sales communication, and automates repetitive tasks such as invoice generation.

The company then pivoted to also generating digital sales leads for clients, which involves identifying prospective customers for a product or service.

QuickDesk began offering training programmes as well at the end of 2018, after Ms Tan realised that there was significant interest from clients to learn more about digital marketing.

The company is looking to move next towards artificial intelligence-enabled automation, which could involve, for example, determining when the best time is to message a consumer on Facebook or WhatsApp and automating that process.

LEARNING FROM EXPERIENCE

> I've learnt from experience to embrace the role and not put myself down.

MS CHARMAIN TAN, on struggling with self-doubt at times because she does not have prior technical expertise.

"It's challenging because the technology keeps changing and we have to keep innovating to keep up," Ms Tan said.

"But the benefits from investing the time (to do so) are compounded, and it's so fun too because I never stop learning."

Ms Tan said that as a female entrepreneur in the tech space, she has always tried to make the best of the cards she has been dealt.

"Yes I'm female, but there are also advantages to that. For one thing, that helps us stand out more," she said.

But she acknowledged that she has struggled with self-doubt at times because she does not have prior technical expertise.

Ms Tan, who has been attending courses in product management, said: "I feel helpless sometimes when there's a problem with the (software) code and I don't know what to do. But I've learnt from experience to embrace the role and not put myself down."

Lester Wong

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