Rising star: Marita Cheng

MARITA CHENG IS NOTYOUR AVERAGE UNIVERSITY STUDENT. SHE'S THE FOUNDER OF ROBOGALS, AN OUTREACH PROGRAM THAT INTRODUCES YOUNG WOMEN TO ENGINEERING, WAS NAMED 2012 YOUNG AUSTRALIAN OF THE YEAR, AND IS SPEAKING AT THE AIPM NATIONAL CONFERENCE.

JESSICA GOULBURN



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Up and coming Marita Cheng was influenced by the great scientists who came before her. "When I was growing up I was inspired by scientists like Newton and Einstein," she says.

"When I was in my teens, I discovered the Google guys and Steve Jobs, and I was really excited by them, too." Cheng decided to combine her love of engineering and entrepreneurship.

While she is able to learn the relevant technical skills at university, Cheng recognised that there were certain skills she needed that could not be learned in the classroom.

"Being an entrepreneur, you need to develop so many different skills in order to succeed. You need marketing, networking, sales, promotion and teamwork. So in my second year of university, I decided to get more involved."

With a wealth of charity experience from her younger years, Cheng was already one step ahead. She volunteered for Guide Dogs Queensland, the Salvation Army, and Queensland Cancer Fund, and immersed herself in youth leadership organisations such as LeadOn, Rotary and National Youth Week.

Robogals

Outreach made such a difference in her decision to pursue engineering that she wants to pay it forward to other young women.

"I went to an outreach program called the Engineering Link Project where I got to learn about four different types of engineering in four days," Cheng explains. "So I learned about mining engineering, built Lego robots and learned about Mechatronics. That's what really got me excited about engineering."

Concerned by the low number of females in her university engineering class, Cheng founded Robogals in 2008, aiming to introduce girls to the world of engineering.

"You don't see engineers in everyday life, as you do doctors or nurses or teachers. It's important that engineers get out there at schools so the kids know what an engineer does," she explains.

Robogals now visits schools to run robotics workshops, teaching girls how to build and program robots. Rather than only focusing on the big-city kids, Robogals has also gone rural with the Robogals Rural and Regional program.

This year alone, chapters have visited schools in Kalgoorlie, Albury, South East Queensland, rural Victoria and the New South Wales coast. The organisation also trains engineering students from universities across Australia to deliver talks on the profession. Essentially, Cheng says, they're ambassadors for engineering.

Since its formation, Robogals has grown into an international organisation with chapters in six different countries, and has taught robotics to thousands of girls. As well as going into Australian schools and running workshops, Robogals is running an annual science challenge to ensure that the organisation is taking care of children all around Australia.

Girls aged five to 18, nationally, are encouraged to film a science experiment, answer a few questions about engineering and upload it to win great prizes.

"We aim to cover the geography of Australia. We reach the kids in capital cities, the kids in regional areas and now wherever they are through the Internet."

With the Australian Constructions Association as the platinum sponsor and plenty of engineering companies as partners, Robogals is in an excellent position. And the organisation has received great feedback from the students.

"Before one workshop, 42 per cent of the students were interested in engineering – and after the workshop there were 8 out of 10," Cheng explains. "We're really happy and heartened by that kind of feedback." She also says they use the surveys to keep the workshops fresh, fun and engaging.

Recognition

In January this year, Cheng was named Young Australian of the Year, an award she was honoured to receive.

"It was very nerve-wracking knowing you're on stage in front of millions of people and someone may or may not read your name out," she says. But her name was read out, and it has led to newfound opportunities.

"It's an amazing platform for young people in particular because it gives them the opportunity to spread their message, and it's great credibility for them to continue their work," she says.

Cheng will finish her university degree next year and, after graduation, hopes to start her own robotics company.

"I want to make robotic arms that help people in their everyday lives," she says. ••

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