

# Global education

DSTA scholar Hong Peixiang relishes the many learning experiences the scholarship opened for her

by lynn seah

IN 2010, Ms Hong Peixiang signed up for the Defence Science and Technology Agency (DSTA) Undergraduate Scholarship, and at the end of her studies she had a postgraduate degree as well.

This was possible because DSTA supported her participation in the Global Engineering Programme (GEP) at the National University of Singapore (NUS), where she did her bachelor's degree in mechanical engineering. That included sponsoring her for a year of postgraduate studies at a GEP partner university overseas.

The GEP is for top engineering students at NUS, giving them an accelerated pathway and an international educational experience.

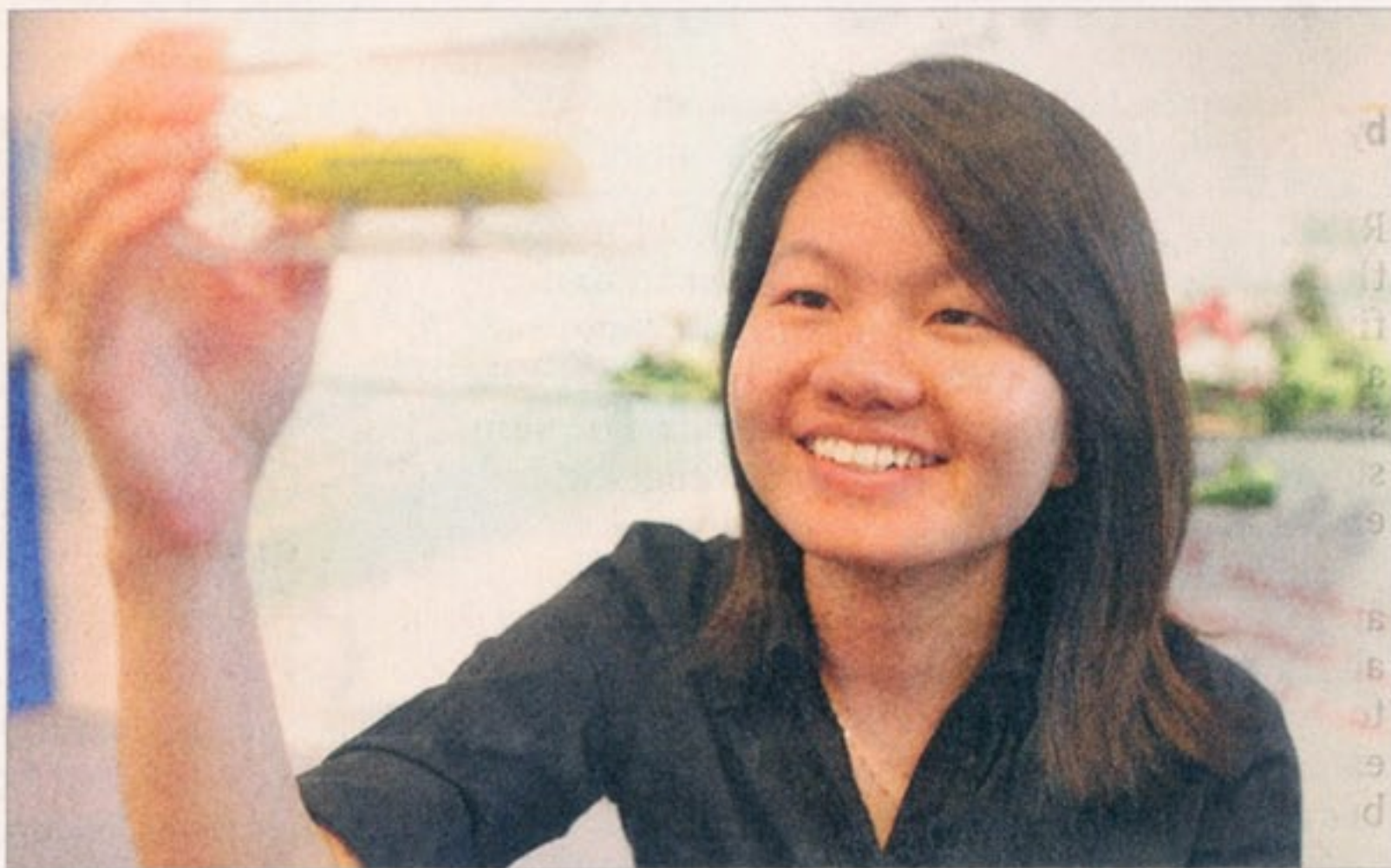
So Ms Hong headed to the University of Illinois at Urbana-Champaign in the United States, where she received a Master of Science in Mechanical Engineering, in addition to her bachelor's degree from NUS. She also spent a summer at Germany's Technische Universitat Munchen where she picked up basic German.

"The scholarship provided me a world-class education that pushed me to the fullest extent of my abilities," she says.

The DSTA Undergraduate Scholarship is open to Singapore citizens with a passion for science and technology, as well as outstanding A-level (or equivalent) results and co-curricular activity records.

The 25-year-old has been working as an engineer with DSTA's Naval Systems Programme Centre for a little over a year.

At DSTA, scholars can indicate which areas of technology they would like to develop, and the Naval Systems Programme Centre was one of Ms Hong's choices. A three-month internship at the centre during a term break in university had given her a taste of the work there.



Ms Hong has been working as an engineer with DSTA's Naval Systems Programme Centre for a little over a year. PHOTO: DSTA

The Naval Systems Programme Centre acquires and integrates advanced surface and underwater naval systems for the Republic of Singapore Navy (RSN).

Says Ms Hong: "To deliver Singapore's defence capability in naval system, some form of customisation is necessary. As a naval engineer, I assess and integrate underwater systems to enhance the RSN's underwater capabilities by identifying the most suitable and cost-effective technologies and solutions."

## Branching out

In the future, she hopes to have a chance to branch out to other naval systems' clusters or programme centres, and work on different systems and platforms.

DSTA has a Personalised Career Development Plan to help staff review their career development and co-create a five-year plan with their supervisors. There is a strong emphasis on training and development, with a Staff Development Framework and structured advancement opportunities for engineers.

"I was able to discuss and plan

my career progression with my supervisors, where I expressed my interest to develop deep technical know-how," says Ms Hong.

One aspect of the organisation is that staff can gain experiences outside their core work. Under its Work Experience Programme, Ms Hong was attached to DSO National Laboratories – one of the defence organisations within the Defence Technology Community (DTC) – where she conducted research and proposed solutions to reduce the power consumption of an Autonomous Underwater Vehicle (AUV) system.

"Through this experience, I was able to strengthen my technical foundation and gained a better appreciation of the work that other partner organisations within the DTC engage in," she says.

Looking ahead, she sees many exciting options. "DSTA is a large organisation that deals with a wide range of technological domains and provides opportunities in different areas of engineering.

"I relish the opportunity to hone diverse technical competencies throughout my career," she says.