

DEVELOPING SYSTEMS ARCHITECTURES FOR DEFENCE



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DEGREE: Bachelor of Engineering (Electrical Engineering) (1st Class Honours), 2009

ROLE: Senior Systems Architect, DSTA Masterplanning and Systems Architecting (DMSA) Programme Centre

EMPLOYER: Defence Science and Technology Agency (DSTA)

MY JOB

I develop systems architectures to meet the challenges of a network-centric Singapore Armed Forces. Working together with a multidisciplinary team of engineers, we develop blueprints for systems acquisitions and development, and ensure that the systems fit and interoperate with other systems.

The masterplans we design must be flexible and agile in addressing a wide spectrum of scenarios to address Singapore's future defence and national security needs.

HOW I GOT MY JOB

During my final semester at NUS, I attended a career fair which provided me with the opportunity to speak with DSTA's defence engineers, and gain insights into the exciting work they do.

I first joined DSTA as an engineer at the Naval Systems Programme Centre, where I worked on underwater defence systems. In 2014, I had the opportunity to take on Systems Architecting work at the DMSA Programme Centre. The past seven years in DSTA has been very rewarding. I am provided opportunities to apply cutting-edge technologies in solving real-world problems, and also develop myself through the DSTA Personalised Career Development Plan and in-house courses.

THE HIGHS AND LOWS

My work as a Systems Architect requires me to anticipate future needs, and to look across multidisciplinary technical and defence capability domains. The challenges that come with staying updated and gaining competence across various engineering domains motivate me. I also find work fulfilling as working at DSTA is about constantly seeking new and innovative technological solutions that will enhance our defence capabilities. I love that my work is meaningful in contributing to Singapore's defence and national security.

MY HAPPIEST MOMENT AT WORK

In February 2012, I was given the opportunity to work overseas for nine months, where I collaborated with and learnt from technical experts in the field of underwater defence systems. In 2013, my team won the DSTA Excellence Award for our innovative work on the integration of an underwater defence system. It was definitely a proud moment knowing that our work is appreciated by the organisation.

SOME ADVICE

A defence engineer must possess a strong desire to learn. He should be open to alternative perspectives while also having the conviction to defend his professional opinions even if they challenge established norms.