

Publication: Hard Ware Zone Online

Date: 30 Nov 2016

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By Koh Wanzi on 30 Nov 2016, 11:11am



Image Source: NVIDIA

NVIDIA today announced that the Singapore Management University (SMU) is the first institution in Singapore and the Southeast Asian region to take advantage of an **NVIDIA DGX-1 deep learning supercomputer** for AI research.

The supercomputer has been deployed at the **SMU Living Analytics Research Center (LARC)**, where it will conduct research on ways to apply artificial intelligence to Singapore's Smart Nation project. Established in 2011 and funded by the National Research Foundation, LARC explores innovative technologies and software platforms that are relevant to the country's Smart Nation initiative.

NVIDIA [first unveiled the DGX-1 back in April](#). Comprising **eight [Tesla P100 Pascal-based GPUs](#)**, the DGX-1 ships with everything needed to meet the compute demands of AI, including preinstalled deep learning software.

It is intended to lower the barriers required to perform deep learning research, providing researchers and data scientists with a ready-made system packed with the power of GPU-accelerated computing. The possibilities are boundless, and computers leveraging the capabilities of neural networks can be taught to see, perceive, and learn about the world as humans do.

Recently, researchers at Google's DeepMind division successfully [created a software based on artificial neural networks that can lip-read more accurately than a professional human lip-reader.](#)

Bigger, more complex data sets require more layers of neural networks to process, which in turn require better hardware. That said, the computing power served up by the DGX-1 supercomputer allows researchers to train larger, more sophisticated neural networks faster, thus speeding up research progress.

One of LARC's featured projects is a **food AI application** that analyzes a large number of food photos in order to make smart recommendations for a healthier lifestyle. Eventually, the hope is to teach the machine to recognize around 1,000 popular local food dishes, in addition to analysis of food data in supermarkets to help with healthy recommendations.