

HP and NTU Singapore announce \$84M digital manufacturing lab

The HP-NTU Digital Manufacturing Corporate Lab will support research on 3D printing, AI, materials and more



Tess Boissonneault • October 23, 2018 0 182 2 minutes read



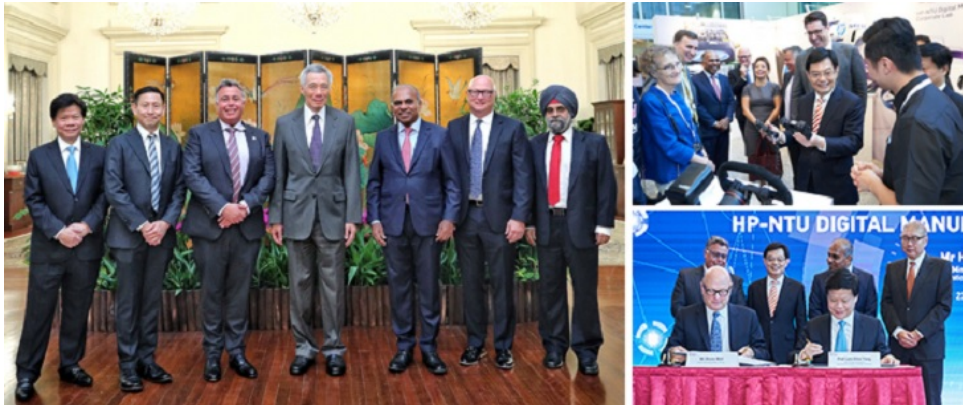
HP Inc. has announced a collaboration with the Nanyang Technological University, Singapore (NTU Singapore) and the National Research Foundation Singapore (NRF) to launch the HP-NTU Digital Manufacturing Corporate Lab. The new lab, which cost \$84 million, will support various areas geared towards accelerating the Fourth Industrial Revolution.

More specifically, the Singapore-based facility will focus its research on digital manufacturing, additive manufacturing and other advanced manufacturing technologies—all of which are emphasized in Singapore’s Research, Innovation and Enterprise (RIE) 2020 Plan.

Not only is the new lab HP’s first university laboratory collaboration in Asia, it is also the company’s biggest university collaboration in the world. The facility itself is based at NTU and will employ 100 researchers and staff, all of whom will be working on advancing technologies in the areas of 3D printing, artificial intelligence, machine learning, new materials and applications, cybersecurity and customization.

“Corporate laboratories are an integral part of our strategy to anchor joint R&D partnerships between our universities and companies in areas that have direct relevance to the growth of industries in Singapore,” commented NRF CEO Professor Low Teck Seng.

“The HP-NTU Digital Manufacturing Corporate Laboratory is significant to our long-term competitiveness in the advanced manufacturing sector, and ensures that we stay relevant in the Fourth Industrial Revolution that is evolving and growing rapidly world-wide. It will also strengthen our capabilities to support multinational companies for expansion from Singapore into the region.”



The partnership between NTU Singapore, NRF and HP was made official today, as the partnership was signed by Professor Lam Khin Yong, the NTU Vice President and Shane Wall, the CTO and head of HP Labs. The signing was also witnessed by Heng Swee Keat, the Minister for Finance and NRF Chairman, NTU President Professor Subra Suresh and HP’s CEO and President Dion Weisler.

Notably, the corporate lab will be supported by the NRF, a government body which actively facilitates the establishment of corporate labs. The HP-NTU lab marks the 13th corporate lab that the NRF supports.

“NTU has established deep capabilities and is a recognised leader in the areas of machine learning, data science and additive manufacturing,” said Professor Suresh. “These cutting-edge technologies are now an integral part of NTU’s education and research ecosystem, and the NTU Smart Campus serves as a test bed for them. This is aligned with Singapore’s vision of transforming into a Smart Nation.

“Together with HP Inc., a renowned innovator and leader in the tech industry, NTU seeks to address today’s fundamental challenges with solutions that will benefit both industry and society in Singapore and the world, such as developing automation that is capable of boosting manufacturing productivity.”

When it opens, the HP-NTU corporate lab will kick off its first 15 projects, which will be centered on new materials and applications, AI and machine learning and



cyber security. In the new materials segment, it will investigate projects about advanced polymers for manufacturing, bioprinting models and advanced 4D printed smart materials. Within the context of AI and machine learning, researchers will conduct a project aimed at improving how 3D printers predict and resolve issues. In addition to these initial projects, the lab will also house projects dedicated to developing educational curriculum on design for additive manufacturing (DfAM).

“

“Singapore is one of our key worldwide technology development and manufacturing centres in Print technology,” added Weisler. “The HP-NTU Digital Manufacturing Corporate Lab will significantly deepen our involvement here and serve as a nucleus for this ecosystem. We are proud to collaborate with NTU and we are looking forward to this becoming a blueprint for innovation, collaboration and economic progress.”

