



Department of Computer Science & Engineering

High Performance Computing Lab

High Performance Computing Lab (HPC Lab) was established in 2020 at Department of Computer science and engineering, IUST convened by Dr. Assif Assad. The lab is in the main building of the Department. At HPC labs, we aim to research to address future needs of high-end parallel computing. Rapid advancements in machine learning have ushered a new era in system design, by integrating many systems in a single framework. This makes the whole system much more powerful than it used to be earlier. It has, in turn, enabled us to solve even those problems which hardly had practical significance in the past. Our vision is to develop such high-performance, practical solutions, and contribute to the needs of both





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scientific and engineering community Lab is equipped by a master node, six compute nodes - out of which three have NVIDIA V100 GPUs, two I/O nodes which maintain a usable PFS of 240TB capacity. All the servers are connected to a primary high speed 100GBPS Mellanox switch in addition to two Gigabit Ethernet switches. All the servers have two latest generation Intel Xeon Gold Processors @3.1GHZ with 20C/40T, 512GB RAM and 2TB high speed SSD (the head node has 1024GB RAM). In addition to this, there are 10 workstations with NVIDIA 2080 super graphics cards and 32GB RAM for students and faculty to access the HPC.

