Tender notification for the procurement of a "Multi-GPU Desktop/Workstations for Deep Learning" (Last date: 08.04.2019)

In order to accomplish the goals of a project we plan to procure two (QTY:2) multi-GPU based high performance Desktop/Workstations to train deep learning models. In the following we list the minimum specifications that we insist upon in the solution.

Minimum specifications for each Desktop/Workstation is:

- Processor: Single CPU with minimum 20-Core Intel Xeon E5-2698 v4 2.2 GHz or better

- CPU Memory: 256GB RDIMM DDR4

- GPU & memory: 4 x NVIDIA V100 GPUs with 32GB HBM2 per GPU memory. (Total of 128GB GPU memory), All GPUs connected with High bandwidth NVLink interconnect.

- TFLOPS: (GPU FP16) 450 TF or better

- Power Requirements: Less than 1800 W

- Storage: 4 x 1.92 TB SSD

- System Network: Dual x10 GB Ethernet ports,

- Display Port: Display ports with 4K resolution (Display will be purchased separately)

- Desktop/Workstation model with integrated water cooled system (The advantage of water cooling is that it reduces noise and keep GPU much cooler.)

- GPU Communications protocol & Topology: NVLink 2.0 (300GBytes/s) between all the GPUs for efficient application scaling.

- OS Software: Ubuntu Desktop Host OS

- Pre-installed and optimized Deep Learning Frameworks: Caffe, CNTK, Tensorflow, Theano, Torch with Docker containers for deploying Deep learning frameworks.

- Required DL SDKs: CUDA toolkit CUDA tuned Neural Network (cuDNN) Primitives TensorRT Inference Engine DeepStream SDK Video Analytics CUDA tuned BLAS CUDA tuned Sparse Matrix Operations (cuSPARSE) Multi-GPU Communications (NCCL).

- Desktop/Workstation should work in ambient temperature (10°C to 30°C)

- Minimum 3-years onsite warranty should be included.

In the case of price being same the following will get the preference

1. Lowest power configuration will be considered.

Terms and conditions

1. Two-bid system (separate technical and financial bids) in sealed tenders, covers containing the technical and commercial bids must be individually sealed, and superscribed respectively as "GPU Workstation – Technical Bid" and "GPU Workstation – Commercial Bid". The two covers must be put in a larger envelope, sealed, superscribed as "GPU Desktop/Workstation".

2. The technical bid must clearly specify the prescribed technical specifications without including the prices. The detailed specifications should be given for the above. Unique characteristics may be highlighted. Technical compliance report must be attached. All the commercial terms and conditions including advance, warranty, payment terms etc., should be included as part of the technical bid.

3. Vendors who include price information in the technical bids will be automatically disqualified.

4. At least 3 independent reference letters from installations worldwide with at least one reference from India meeting the above specifications or better without which the quote will not be considered. IISc may contact more users for obtaining independent references. The committee will have right to reject a bid based on reference letters.

5. Technical bids will be opened first. IISc may seek clarifications after opening of technical bids and may ask vendors to perform some example experiments on the samples given by IISc to demonstrate the promised technical specifications. Vendors may be required to give presentations.

6. Price bids of only technically qualified vendors will be considered.

7. The price quoted must offer CIF Bangalore prices. The price quoted must be inclusive of all duties, taxes, and concessional exemptions as applicable to IISc.

8. The total solution as per the agreed bill of materials must be supplied within 4 – 6 weeks after receiving a firm PO from IISc. The installation and acceptance must be completed within 2-3 weeks after supply of the equipment.

9. Prebid clarification meeting will be held if required after one week from the notification of the tender.

10. IISc also reserves the right to cancel the tender at any time without assigning any reason whatsoever.

11. The tender documents should be sent at the following address.

The Chairman
SERC,
Indian Institute of Science,
Bangalore 560012
Karnataka, INDIA