Centre for High Performance Computing 2020 National Conference

Monday 30 November 2020

HPC: Software Platforms (14:00-15:00)

-Conveners: Chair: Zama Mtshali

time	[id] title	presenter
14:00	[102] Configuring the Kaldi ASR toolkit for the Lengau Cluster	VAN DER WESTHUIZEN, Ewald
14:30	[127] Stories from the Front Lines: The Good, Bad, and Ugly of Building an Opensource Distributed Platform for Scientific Compute: Software, Hardware, and Community	PIENAAR, Rudolph

HPC: for AI and Machine Learning (15:15-16:15)

-Conveners: Chair: Krishna Govender

time	[id] title	presenter
15:15	[33] Accelerating HPC+AI science workflows using NVIDIA GPU	Dr RÖTH, Gunter
15:45	[171] The Role of Storage for efficient Machine Learning	BREUNER, Sven

Tuesday 01 December 2020

HPC: Education (11:00-12:00)

-Conveners: Chair: Bryan Johnston

time	[id] title	presenter
11:00	[21] From touching the code to online coding clubs	GREYLING, Jean
11:30	[80] Two decades of African research on academia-industry high performance computing access and utilization – A systematic literature review	Prof. CILLIERS, Liezel

HPC: Technology (12:15-13:15)

-Conveners: Chair: Themba Hlatshwayo

time	[id] title	presenter
12:15	[153] NVIDIA Mellanox InfiniBand In-Network Computing	SHAINER, Gilad
12:45	[147] Budgets and Allocation in HPC	Dr LITTLEWOOD, Ian

HPC: Technology (14:00-15:00)

-Conveners: Chair: Eric Mbele

time	[id] title	presenter
14:00	[169] Diversified Computing Power for Pervasive Intelligence	Dr ZHOU, Bin
14:30	[151] Artificial Techniques in Pharmaceuticals and Drug Discovery	KHALEEL, Adnan

HPC: Technology (15:15-16:15)

-Conveners: Chair: Sticks Mabakane

time	[id] title	presenter
15:15	[174] Talk by Microsoft Cancelled on Short Notice	
15:45	[170] AMD's Heterogeneous Path to Exascale	FOLEY, Matt

Wednesday 02 December 2020

HPC: Storage & IO (11:00-12:00)

-Conveners: Chair: Lepeke Phukungoane

time	[id] title	presenter
11:00	[36] Calabash - why store your data in a cloud when you can use a gourd ?	RATCLIFFE, Simon
11:30	[17] SANReN Data Transfer Pilot Service and Performance Enhancement Response Team update	PILLAY, Kasandra

HPC: Storage & IO (12:15-13:15)

-Conveners: Chair: Jay Lofstead

time	[id] title	presenter
12:15	[103] Converging Storage Technologies Using a Flexible HPC Storage Framework	KUHN, Michael
12:45	[117] The GekkoFS Burst Buffer File System	Prof. BRINKMANN, André

HPC: Storage & IO (14:00-15:00)

-Conveners: Chair: Sean Murray

time	[id] title	presenter
14:00	[59] A Workflow for Identifying Jobs with Similar I/O Behavior Utilizing Time Series Analysis	Dr KUNKEL, Julian
14:30	[88] Stitch-IO for Additive Manufacturing Simulation	LOFSTEAD, Jay

HPC: Storage & IO (15:15-16:15)

-Conveners: Chair: Jay Lofstead

time	[id] title	presenter
15:15	[35] LANL HPC Storage Thrusts	Mr GRIDER, Gary
15:45	[41] Managing Bufferbloat in Storage Systems	MALTZAHN, Carlos