25 October 2024

To Whom It May Concern:

I hereby endorse **Phemelo Mokwena** for attending more than 75% of the "Building High-Performance Computing Clusters" module sessions in 2024.

During this six-month course, the participant gained first-hand work experience in building a High-Performance Computing cluster. Although the focus was on creating a Scientific Computing Cluster, the knowledge gained is transferable to building other distributed clusters such as multi-tenant cloud, database, high-availability, or other compute- or data-driven infrastructures.

During the course, participants had to install a GNU Linux management node and two worker nodes from scratch using a private cloud backend. Networking between participants' nodes was isolated using VLANs. Participants had to ensure that communication and authentication between the nodes were secure and seamless to the end user. Several services and software packages were installed and configured to create the building blocks of a functional cluster.

Albert van Eck (Director: eResearch & High-Performance Computing) – Facilitator & Lecturer

Prof Eduan Kotzé (Head of Department: Computer Sciences & Informatics)