



Contribution ID: 80

Type: **Talk**

Two decades of African research on academia-industry high performance computing access and utilization – A systematic literature review

Tuesday, 1 December 2020 11:30 (30 minutes)

There are arguments amongst academics and practitioners alike for the importance of countries on the African to plug into the information society. On the ground, this has resulted in an emphasis on the importance of partnerships not just within institutions of higher learning but also amongst those in industry. Internationally, we note the growth in interest of research around such partnerships and a documented trail of evidence within the academic and practitioner press. The focal point of such research appears to be centered on documented evidence-based interactions of such partnerships. Such international research is lauded in aiding our understanding and proffering best practices around human and computer system interaction issues. Despite this progress, we note with concern scant focus on African case examples around academia-industry collaborations and issues related to high performance computing access and utilization. In this study, through a systematic literature review, we attempt to present the state of being around such research on the African continent using published peer-reviewed studies published between 2000 and 2020. The research findings are grouped around: a) the research methods utilized; b) underpinning theories and c) key factors employed to study academia-industry information collaboration, utilization, and access issues related to high-performance computing systems. Based on the review, we then suggest future research directions including themes that may enhance academia-industry partnerships around issues related to high-performance computing systems access and utilization on the African continent. This research provides useful insights to academics and practitioners on the African continent against the presented ideals.

Student?

No

Supervisor name

Supervisor email

Primary author: Prof. CILLIERS, Liezel (University of Fort Hare)

Co-authors: Prof. CHINYAMURINDI, Willie (University of Fort Hare); Prof. SHAMBARE, Richardson (University of Western Cape); Prof. MAHEMBE, Bright (University of Western Cape); Prof. SETATI, Tlou (University of Limpopo); Dr MASHA, Athony (Walter Sisulu University); Dr NGRANDE, Hlanganipai (University of Venda); Dr MAGIGABA, Makhosazana Faith (University of Zulu Land)

Presenter: Prof. CILLIERS, Liezel (University of Fort Hare)

Session Classification: HPC

Track Classification: HPC Technology