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### **From student SIG to success: The journey of a student HPC special interest group towards sustainable training and success in student cluster competitions**

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Developing a sustainable High Performance Computing (HPC) workforce pipeline remains a global priority. As access to HPC resources continues to improve in Africa, the shortage of available skilled HPC personnel is a significant impediment to the adoption of advanced research computing infrastructure. South Africa has several workforce training initiatives aimed at developing career HPC system administrators, yet, apart from the annual national Student Cluster Competition (SCC)– an initiative of South Africa’s Centre for High performance Computing (CHPC)– there are no other formal training programmes available for the undergraduate student community. Each year since the inception of the CHPC-SCC the University of the Witwatersrand (“Wits”) has entered at least one team. Through the implementation of an array of student-led training approaches using decommissioned HPC hardware, Wits has enjoyed continued success at these SCC events. Moreover, Wits students have been part of the national teams that have achieved six top-3 finishes in international Student Cluster Competitions. This paper provides an overview of the student HPC Special Interest Group (SIG) formed at the University of the Witwatersrand that focuses on delivering HPC training to the undergraduate student community. The paper outlines the approach towards growing and maintaining the interest group, including teaching and learning strategies to prepare Wits students for Student Cluster Competitions. Insights into the challenges experienced and lessons learned are discussed, particularly with respect to sustainable workforce development.