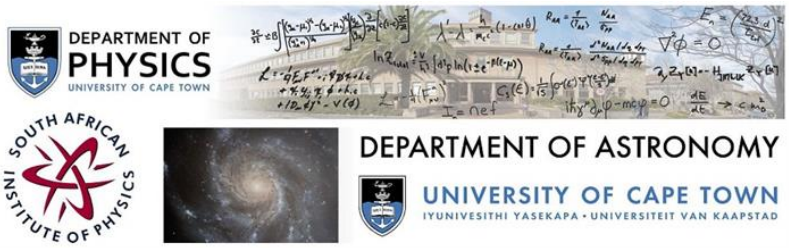
SAIP2016



Contribution ID : 254

Africhino Quasi-Computer

Wednesday 06 Jul 2016 at 16:10 (01h50')

Abstract :

Several applications require acquisition techniques to elaborate the physical signals from the external environment as a control entity. Data handling is the main factor of concern especially with the current technological advancement of the digital world. Specifically, there is a significant necessity for the acquirement of data by utilizing scientific software to efficiently control hardware and vice versa. Current devices utilised for research are expensive and often use a proprietary software which drastically increases the cost of the device. The proposed study will be to develop a high quality and affordable compilation of electronic devices for experimental research and professional users based on the collation of numerous electronic techniques. The envisaged device is an open source software and hardware electronics design. The intended device is an inexpensive stand-alone portable laboratory apparatus for research institutions and schools. The proposed product will be based on the development of a complete compact system for experiments and controls or used as a computer. This system can act as an external device to function as a digital signal generator or perform as a controlled power supply which can be used as an apparatus for engineering and research purposes.

Award :
Yes

Level :
Hons

Supervisor :
petruccione@ukzn.ac.za

Paper :
Yes

Permission :
Yes

Primary authors : Mr. NAIDOO, Kreason Aaron (University of KwaZulu-Natal) ; Ms. RAMOHOEBA, Nonky (University of KwaZulu-Natal)

Co-authors : Dr. MARIOLA, Marco (University of kwazulu-natal) ; Dr. ISMAIL, Yaseera (University of KwaZulu-Natal) ; Prof. PETRUCCIONE, Francesco (UKZN)

Presenter : Mr. NAIDOO, Kreason Aaron (University of KwaZulu-Natal) ; Ms. RAMOHOEBA, Nonky (University of KwaZulu-Natal)

Session classification : Poster Session (2)

Track classification : Track F - Applied Physics

Type : Poster Presentation