

Adoption of Low-Cost Gnss Unit and Raspberry Pi 4 for CORS Network in Africa: a Viable Solution for Reliable and Accurate Positioning

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SUMMARY

This abstract describes a study on implementing a low-cost Global Navigation Satellite System (GNSS) unit in a Continuously Operating Reference Station (CORS) network in Africa, and using Raspberry Pi 4 as a supporting solution. The study aimed to address the challenges of expensive GNSS equipment and limited infrastructure in Africa by utilizing a low-cost GNSS unit and the powerful computing capabilities of the Raspberry Pi 4. The results showed that the low-cost GNSS unit and Raspberry Pi 4 combination was able to provide reliable and accurate positioning data, making it a viable option for CORS network in Africa. The adoption of this low-cost solution has the potential to expand access to precise positioning services in Africa and support various applications such as surveying, mapping, and transportation.

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