

# 11th ASEAN Council of Physical Education and Sport (ACPES) International Conference 2025



Contribution ID: 122

Type: **Oral**

## ELITE ATHLETE PHYSICAL PERFORMANCE MONITORING SYSTEM ANALYSIS APPLICATION

*Friday, October 3, 2025 10:15 AM (15 minutes)*

Athlete performance is the ability to achieve optimal results in sports, which is influenced by various physical, psychological, and nutritional factors. The application of an elite athlete physical performance monitoring system aims to determine the level of fitness and physical condition of athletes, which will then be combined into an application.

This study is a continuation of previous research, using a battery of fitness tests to detect fitness levels within an integrated digital administration framework. The implementation of this study is similar to that of a typical test, but the difference is that the process will be integrated online with the equipment, and the test results will be automatically entered upon completion of the test.

The research method uses the Borg and Gall Model research and development (R & D) method which is divided into 2 research stages; Stage 1, development of test tools and Stage 2, development of application software. The results of the study were tested on 100 athletes from 10 sports that the test results of three product assessment indicators that the effectiveness of product use, display of use and the results of the test evaluation on this elite athlete monitoring system application can be used with an overall percentage of 89% is suitable for use. The conclusion of the research trial was to improve the appearance of the test equipment to make it more attractive and the appearance of the test results application to make it easier for users to read the results. This research will contribute to the development of test implementation in North Sumatra Province, Indonesia.

**Authors:** AKHMAD, Imran (Universitas Negeri Medan); Mr AUFAN, Rifqi (Universitas Negeri Medan); Mr HARIADI, Hariadi (Universitas Negeri Medan); Mr HERI, Zulfan (Universitas Negeri Medan); Ms NOVITA, Novita (Universitas Negeri Medan)

**Presenters:** AKHMAD, Imran (Universitas Negeri Medan); Mr AUFAN, Rifqi (Universitas Negeri Medan)

**Session Classification:** Sports Science and Performance and Enhancement

**Track Classification:** Sports Science and Performance Enhancement