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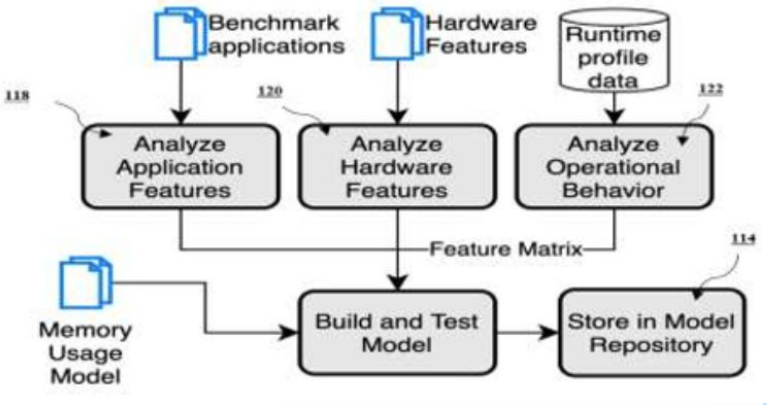
PENDING

(IN202311061376)

A method and a system to just-in-time forecasting of power consumption of an application running on heterogeneous systems



NEED

Computing systems often experience inefficient power usage due to lack of effective monitoring and forecasting. As applications run on diverse devices, understanding and managing their power consumption is crucial for optimizing energy use.

MARKET ANALYSIS

The global power management market is projected to grow at a CAGR of 6.9%, reaching $8.8 billion by 2033 (source: MarketsandMarkets, 2024). The increasing need for energy-efficient systems in computing is a key driver.

TECHNOLOGY OVERVIEW

This invention provides a system for managing power consumption in heterogeneous computing environments. It collects data on application performance, power consumption, and resource utilization, using machine learning to forecast power needs, ensuring more efficient power management and reducing waste.

Target Industries

Cloud service providers, data centers, and computing hardware manufacturers. , Power management solutions providers, energy-efficient system integrators, cloud infrastructure operators.

TECHNOLOGY KEY FEATURES

Machine learning-based forecasting, heterogeneous device support, power consumption prediction, real-time recommendations, integration with infrastructure, model selection, power-throttling, and dynamic recalibration for continuous optimization.

AT A GLANCE

- SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation, and Infrastructure)

Read more here

Technology is available for licensing/ co-development.

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