

# Energy-Saving Cloud Computing Platform Based On Micro-Embedded System

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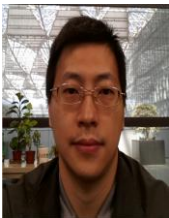
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**Abstract**— Energy consumption and computing performance are two essential considerations when service providers establish new data centres. The energy-saving cloud computing platform proposed in this study as potential applications in internet network information centres because of its excellent energy efficiency when manage large datasets. Increased data nodes in distributed computing systems greatly enhance data processing capacity. Compared to a standard platform, the proposed energy-saving cloud computing platform achieves the goals of energy-saving and high-performance computing which reduce power consumption by 45.5% and reduce computation time by 22.6%.

**Keywords**— Energy saving, Hadoop, MapReduce, Cloud computing, Distributed computing, Power consumption.



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