

Adaptive Prediction Models for Data Center Resources Utilization Estimation

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Summer term 2020

This paper presents a new technique that adaptively and automatically selects the most promising machine learning method to estimate the data center resources utilization.

1 Introduction

The introduction describes why accurate estimation of resource utilization is important, why this accurate estimation is challenging, the main contributions of this paper.

2 Proposed System Methodology

2.1 Workload prediction using machine learning

How workload is predicted using different machine learning classifier.

2.2 Adaptive Model Selector(AMS) using regression models

How various regression model is used to build AMS model.

3 Proposed model evaluation

The section describes the evaluation of proposed model step by step.

3.1 Datasets

3.2 Feature Extraction

3.3 AMS Evaluation

3.4 Resource Estimation

3.5 Window Size Sensitivity

4 Experimental Results

Discuss several evaluation results that has been produced during the time of experiment .

4.1 AMS Evaluation

4.2 Resource Estimation of Three Datasets

4.3 Window size sensitivity

5 Discussion

5.1 Identify Best Prediction Model

5.2 Comparison of Proposed Model with Existing Works

6 Conclusion

References

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