

ABSTRACT

Machine learning is a machine technology that performs data-driven lessons. Machine Learning has a complex workflow so that the scale of the load on machine learning is getting bigger. This problem is can be solved by utilizing cloud computing. Doing deployment on machine learning models will help handle large volumes of data and can develop efficiently. One of the cloud services that will be used is Platform-as-a-Service. PaaS is already equipped with features hardware, software, and infrastructure that can make it easier for users to do deployment. In testing the final project, the author will form a website based on machine learning models that have been formed to know the condition of the Citarum River and conduct tests on the performance of the both Platform-as-a-Service services namely Heroku and Microsoft Azure. The parameter for the tests are throughput, latency, load time, CPU usage and memory usage. The final result of this Final Project shows a feasible cloud server as a platform machine learning deployment model, namely Heroku cloud server generates throughput of 23.6 kbps with an error of 0.00%, latency of 2305 ms, and load time of 2.5 seconds.

Keyword : *Model Machine Learning, Cloud Server, Platform-as-a-Service, Deployment.*