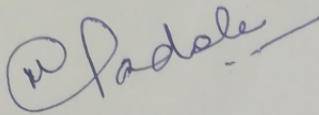


Certificate

This is to certify that Mr. Ankit Arunkumar Shah has worked under my guidance to prepare the thesis entitled 'Performance Optimization of Big Data Processing using Heterogeneous Distributed Computing' which is being submitted herewith towards the requirement for the degree of Doctor of Philosophy in Computer Science and Engineering at The Maharaja Sayajirao University of Baroda.



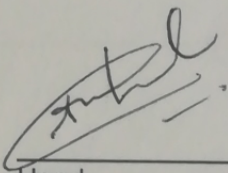
Dr. Mamta Chandraprakash Padole

Department of Computer Science and Engineering

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Head

Department of Computer Science and Engineering

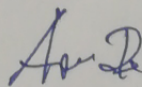
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Dean

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