CERTIFICATE

This is to certify that the Thesis entitled, **Exposing Hardware Building Blocks to**Machine Learning Frameworks and submitted by ID No. 2016A8TS0142P in partial under my supervision. fulfillment of the requirement of BITS F421T Thesis embodies the work done by him

Date: 01 December 2019

Name

Dr. Yaman Umuroğlu

Signature

Designation Machine Learning Researcher