Date: 31st May 2019

UNIVERSITY OF
LINCOLN

To whomsoever it might concern

CERTIFICATE

This is to certify that **Uthiralakshmi S (119005122)**, pursuing Final Year **B. Tech Electrical and Electronics Engineering** from **SASTRA DEEMED UNIVERSITY, THANJAVUR, TAMIL NADU, INDIA** has successfully completed the project, entitled **"Predicting object dynamics from image sequences: a precursor to autonomous object manipulation"** done as a part of Internship in a research project looking at Intelligent Robot Manipulation approaches at **Lincoln Centre for Autonomous Systems, University of Lincoln, Lincoln, United Kingdom** from **1st January 2019 to 31st May**.

In the course of project, she has learned various concepts of Neural networks and Machine learning. She has learned and applied concepts of ROS framework. She has worked with Gazebo and Vrep simulation environments for manipulating a robot to perform pushing and grasping actions. She has worked on training neural networks to predict image sequences. She was very hardworking, enthusiastic and dedicated towards the work.

Harit Pandya
Research Fellow
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