CERTIFICATE

This is to certify that **Ms. PATEL VIBHAVARI RAMESHCHANDRA** has worked under my guidance to prepare thesis entitled "***Design and Development of Lip Extraction Algorithm and Dataset Creation for Gujarati Alphabets Recognition via Lip Movement using Deep Learning***" which is being submitted herewith towards the requirement for the degree of Doctor of Philosophy in Computer Science & Engineering, Faculty of Technology & Engineering, The Maharaja Sayajirao University of Baroda, Vadodara.

Dr. Vishwas Raval   Dean

Guide