INDIAN STATISTICAL INSTITUTE

☎ *(Off:)* *+91-33 -2575-2856,*

Fax *: +91-33-2577-6680, 3035*

E-mail *: umapada@isical.ac.in*

STATISTICAL
INDIAN INSTITUTE
भिन्नेष्वेक्यस्य दर्शनम्
UNITY IN DIVERSITY

Dr. Umapada Pal
Prof. and Head
Computer Vision & Pattern
Recognition Unit
203 Barrackpore Trunk Road,
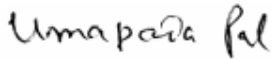*Kolkata - 700108*
INDIA

Dated December 03, 2018

To Whom It May Concern

This is to certify that Aishik Konwer, B.Tech Final year student in Electronics and Communication Engineering at Institute of Engineering & Management, Kolkata, has successfully completed a winter internship under my guidance in the field of 'Computer Vision and Pattern Recognition'. The internship was conducted between October 2016 and February 2017. He used to visit the lab at CVPR unit, Indian Statistical Institute, Kolkata twice a week for these five months. First, I supervised him on a project 'Bangla and Oriya handwriting segmentation'. After that, Aishik collaborated with a Professor from University of Malaya, Kuala Lumpur over the topic 'A New GVF Arrow Pattern for Character Segmentation from Double Line License Plate Images', which later got accepted in 4th IAPR Asian Conference on Pattern Recognition (ACPR), 2017. He also worked in a team with one of my PhD students and did extensive coding in Matlab and Python, related to 'Graphology based Handwritten Character Analysis for Human Behaviour Identification'.

During this internship period, I found Aishik to be very hardworking and committed. I wish him success for the rest of his career.

With Regards

Umapada Pal

(Umapada Pal)