

2021

SS

group 60

Project Mentor
Prof. Sharmila Sengupta
(2019-2020)

**VIVEKANAND EDUCATION SOCIETY'S INSTITUTE OF
TECHNOLOGY**
Department of Computer Engineering



Certificate

This is to certify that *Shreyas Talole, Atharva Bapat, Aditya Shinde* of Third Year Computer Engineering studying under the University of Mumbai have satisfactorily completed the mini project on "*Extraction And Analysis of Information From Ophthalmic Image Report*" as a part of their coursework of Mini Project for Semester-VI under the guidance of their mentor *Prof. Sharmila Sengupta* in the year 2019-2020.

Date:

Project Guide:

Sharmila Sengupta

Industry Certificate

Cere Labs
Know • Connect • Invent

30th January, 2020

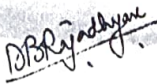
To
Dr. Nupur Giri
Head of the Department,
Computer Science,
VESIT,
Mumbai

Respected Sir/Madam,

With reference to the above mentioned subject, the following students from Vivekanand Education Society's Institute of Technology **Shreyas Talole, Atharva Bapat, and Aditya Shinde**, studying in Third Year Computer Engineering in class D12B, aspire to do a project titled "**Information Extraction from Ophthalmology Report using NLP and ML**" under Cere Labs for the academic year 2019-20. They are working under their project mentor Prof. **Sharmila Sengupta** and the guidance of their Head of Department Dr. **Nupur Giri**. Throughout the year these students would work under our practical guidance and adhere to the rules and regulations of their college.

Providing the best wishes and hoping for a good venture with them.

Yours Sincerely,



Devesh Rajadhyax
Founder and CEO



Cere Labs Pvt. Ltd.

Abstract

The aim of the paper is to correctly classify the test reports with respect to the tests done on the patient, and the diagnosis; to enable the doctor to efficiently access the records to annotate the report images for training a deep learning model that could identify the disease without any human involvement. To manually classify a huge number of reports is a tedious and time consuming task and would be preferably done by automation. To make use of advanced computer algorithms to produce benevolent results will be considered to be a valuable contribution. The task begins with extracting the text from the doctor's reports and classifying the information into various parts in accordance with the report itself. This text content is in the form of doctor's investigation and therefore it is required to convert it into structured format. This format is henceforth used to train a model that classifies the report automatically and notifies presence/absence of any disease. The model would then be able to correctly detect the presence of the disease and would make a record of the same in the statistical CSV file.

processing images & building a neural net
to identify diseases from images of eye
sonography.