## **R**EPORT FOR INTERNATIONAL INTERNSHIP

STUDENT NAME: MUSKAN JAIN

PROGRAM NAME: NON EXCHANGE UNDERGRADUATE

STUDENT PROGRAM

UNIVERSITY: NANYANG TECHNOLOGICAL UNIVERSITY,

Singapore

DEPARTMENT: COMPUTER SCIENCE

PROJECT TOPIC: DEEP LEARNING ON GRAPHS

IITKGP DEPT./SCHOOL/CENTER AND DEGREE PROGRAM: Mathematics, 5 year Integrated Msc

DURATION OF INTERNSHIP: 2 MONTHS

SUPERVISOR NAME: ASSISTANT PROF ARIJIT KHAN

## PROJECT DETAILS, OUTCOMES AND SUMMARY (3-4 BULLET POINTS OF WHAT YOU LEARNED AND HOW IT IS GOING TO APPLY TO REAL LIFE):

• Researched over the existing interpretability techniques viz backpropagation-based (Layerwise Relevance propagation, Integrated gradients, deconvolutional networks, etc), Grad-CAM, DeepLIFT, etc.

 Implemented an interpretability model capable of explaining any graph classification result.

• Trained a deep learning model, using the university's gpu cluster, over graph datasets for classification results.

• Deployed the interpretability model over the trained deep learning model, further prepared and analysed the results.

## **OTHER ACTIVITES:**

- Prepared and demonstrated presentations weekly.
- Prepared and submitted the final report and documented the whole code for the use of next interns.