



## Department of Electronics and Telecommunication Engineering Jadavpur University

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### TO WHOM IT MAY CONCERN

July 7, 2024

This is to certify that **Semanti Ghosh**, an undergraduate student of second year second semester in *Industrial and System Engineering* of IIT Kharagpur, has successfully completed her summer intern on "*Classification of Functional Near Infrared Spectroscopic Data using Graph Convolution Neural Network*" under the joint guidance of the undersigned in Artificial Intelligence Lab, Department of Electronics and Tele-Communication Engineering, Jadavpur University for approximately 2 months in May-June, 2024. During her tenure at Jadavpur University, she learnt the principles of supervised learning in a Graph Convolution Neural Network (GCNN) and its application in classification of emotional states in solving MCQ problems from the acquired functional Near Infrared Spectroscopic (fNIRS) data of the participants in the MCQ test. The motivation of her research is to detect the level of uncertainty (guess work) involved of the participants, particularly for the correct answers. The internship includes survey of GCNN literature, fNIRS data analysis, and simulation of the problem under consideration using Python.

The research team of the AI Lab congratulates Ms. Semanti Ghosh for her hard effort to learn new concept and decipher her views among other research team members. Ms. Semanti Ghosh is strongly encouraged to undertake further research in the allied topics of Deep Learning. The AI Lab team wishes her success in all her future research endeavors.

**Ms. Sayantani Ghosh**  
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