## To whom it may concern

Tariqui was introduced to me during the Discrete Mathematics course. I recognized him immediately because of his inquisitiveness and enthusiasm. Furthermore, he was remarkable for his interest in learning more and ask advanced questions. As a result, he was given preference during the thesis group selection process later on.

I supervised his undergraduate thesis on deep learning, which led to image segmentation using neural networks. The primary objective was to use a fully convolutional neural network to segment tumor tissue from the brain in terms of improving dice score performance and training time. Though processing the 3D MRI image dataset to acquire the expected result was a significant challenge, he was able to complete it successfully under my supervision. Tariqul provided multiple unique observations and significant conclusions throughout the thesis. Along with his academic activities, I noticed his enthusiastic participation in sports, event organization, and effective management of various co-curricular clubs. I believe that the teamwork, leadership, and organizational skills he managed to gain through his extracurricular activities impacted his thesis work as well. Furthermore, from topic selection to final thesis presentation, Tariqul had always handled situations very smartly with thorough logical analyzation and sharp wording, which he would seem to have obtained from his actively participating in the AUST debating society.

Tariqul has also been identified as someone who is very interested in and invested in software development. He had a very positive influence on the younger students, encouraging them to pursue this topic as well. He had taken part in a number of hackathons and project shows, and we used to have some very insightful discussions about his ideas for presenting in these programs. During these discussions, I noticed his enthusiasm for developing software for the betterment of society. This personality is just one of many signs of his kind and warm heart.

I believe he will bring his unique energy, passion, and boundless creativity to your class and the university as a whole. Moreover, I am self - assured that he possesses all of the skills and competencies required to be a professional researcher in his field. So, I hope you will consider his candidacy for the program to that he has applied.

Sincerely,

Fran Hair

**Emam Hossain** 

Assistant Professor, Dept. Of CSE
Ahsanullah University of Science And Technology (Aust)

Email: emamhossain.cse@aust.edu