



## CSE DEPARTMENT

*Computer Science & Engineering, School of Data & Sciences*

### **To Whom It May Concern**

I am writing this letter to recommend Shadman Ahmad Nafee, who completed his BSc in Computer Science from BRAC University in the Spring of 2024. As a Professor in the Department of Computer Science and Engineering, I have known Shadman for two years, both as a course coordinator and thesis supervisor.

I supervised Shadman's thesis project, "TinyML-based person identification in dynamic motion," where he demonstrated exceptional technical skills and innovative thinking. Using ESP32-CAM, a cost-effective hardware solution, he successfully implemented various deep learning models including ResNet50, VGG16, MobileNetV2, SqueezeNet, and MobileFaceNet for person identification. What impressed me most was his practical approach to creating and training models using a custom dataset, achieving remarkable accuracy rates. His work has potential applications ranging from smart home security to agricultural monitoring systems.

Throughout the thesis, Shadman displayed strong logical thinking abilities and intellectual curiosity beyond that of his peers. He was an active participant who consistently raised thoughtful questions and demonstrated a clear understanding of complex technical concepts. His ability to deliver clear, concise, and well-thought-out presentations of his research findings was particularly noteworthy.

Based on my observations of his capabilities and dedication, I strongly believe Shadman possesses both the determination and intellect to excel in your graduate program. His combination of technical skills, research aptitude, and strong work ethic makes him an excellent candidate for advanced studies.

Please feel free to contact me if you require any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Amitabha".

03.12.24

Dr. Amitabha Chakrabarty  
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Email: [amitabha@bracu.ac.bd](mailto:amitabha@bracu.ac.bd)