



# CLUSTER INNOVATION CENTRE (UNIVERSITY OF DELHI)

Rugby Sevens Building, University Stadium, G.C.Narang Road,  
University of Delhi, Delhi-110007, Ph. 27666702

**Prof Shobha Bagai**  
*Director*

## TO WHOMSOEVER IT MAY CONCERN

It is with great pleasure that I recommend Siddharth, a student in our Bachelor of Engineering program at the Cluster Innovation Center, University of Delhi. Over the course of his studies, I have closely observed his academic progress, research capabilities, and innovative mindset. Siddharth's passion for learning and dedication to the fields of Information Technology and Data Science are truly commendable.

During his time at the university, Siddharth has undertaken multiple technically challenging projects that exemplify his drive to apply theoretical knowledge to solve real-world problems. For example, in one of his projects, Siddharth developed a platform to analyze SEC 10-K filings by leveraging advanced Large Language Models (LLMs) like Mistral-7B. He implemented a highly effective data pipeline using Python for web scraping, handling massive volumes of financial textual data. Through Natural Language Processing (NLP) techniques, he adeptly managed the complexities of financial jargon.

In the healthcare domain, Siddharth contributed significantly to a project aimed at diagnosing depression using machine learning. He procured clinical datasets and addressed challenges such as data imbalance through techniques like Synthetic Minority Over-sampling Technique (SMOTE). Siddharth experimented with various classification algorithms, including K-Nearest Neighbors (KNN), eXtreme Gradient Boosting (XGBoost), and Random Forests. The final model achieved an accuracy of 93%, along with high precision and recall scores, effectively distinguishing between varying levels of depression in patients. His work not only demonstrated his technical prowess but also highlighted his sensitivity to using technology to tackle critical healthcare issues.

Siddharth's career aspirations are focused on leveraging his technical expertise to develop impactful solutions in the fields of data science and artificial intelligence. His passion for learning, combined with his proven academic and technical abilities, makes him an excellent candidate for the NTU Connect Fellowship. I am confident that he will excel in this program and contribute significantly to the research community.

I highly recommend Siddharth for the NTU Connect Fellowship that align with his interests and capabilities. His blend of technical knowledge, innovative thinking, and collaborative spirit will make him an asset to any research or development team.

(Shobha Bagai)