**Conclusion and Scope of Future Work**

The research article focuses on a comparative study between Traditional Machine Learning Algorithms and Neural Networks. From the study, it is evident that both Models have their own positive and negative aspects. The Traditional Model focuses on a simplistic approach to automate the learning process of machines and find hidden and unseen patterns. The Neural Networks, on the other hand, try to mimic the working of the human brain, by setting up processing nodes called neurons in a systematic plan and each neuron is interconnected with each others giving rise to a fully connected network.

Traditional ML models are very useful for small to medium-sized datasets, whereas, neural networks are well known for their ability to handle complicated and high-dimensional datasets. Due to the simplicity of traditional ML models, their computing time is often faster than neural networks. Thus, Neural Networks are much more resource hungry and complex to implement.

The factors responsible for choosing between implementing the traditional ML models or the Neural Networks depend upon the type and quality of the dataset, the computing resources and the budget.

As the field of Machine Learning and Artificial Intelligence continues to evolve at an exponential rate, both the Traditional Machine Learning Models and the Neural Networks will continue to upgrade themselves in terms of accuracy, computation time and resource needs. It is important to continue to explore and develop new approaches that combine the strengths of these models and address their limitations, to improve accuracy, interpretability, and scalability.

From our comparative analysis of the selected dataset, we conclude, Residual Neural Network (ResNet) has worked exceptionally better than all the traditional Machine Learning Models with an accuracy of 99%, a precision of 0.985, a recall of 0.99 and an F1-Score of 0.985. Standing next to the ResNet is ANN with an accuracy of 98%, a precision of 0.98, a recall of 0.97 and an F1-Score of 0.975. Thus, we can conclude, for our chosen dataset, the Neural Networks have performed exceptionally better in terms of the evaluation metrics. With the advent of more precise attributes in the future, the accuracy of the ML Models and Neural Networks can be boosted to a great extent using Feature Selection, Dimension Reduction and all the other effective and essential Data Pre-processing Techniques.