IV. CONCLUSION

In this work we proposed an artificial neural network Embedded Acoustic Noise Cancellation System for enhancing the quality of communication. The main advantage of the proposed system is its efficiency for non-linear phenomena such as acoustic noise. The proposed Embedded ANC's effectiveness is then evaluated by using SNR and MSE, neuronal architecture, and number of iteration criteria. However, the obtained result can show that the ANN ANC algorithm provides the fastest convergence rate, best values of SNR, and lowest MSE compared to adaptive algorithms. Further work could be done in implementing the embedded ANC for a real-time applications by using a Digital Signal Processor (DSP), Field Programmable Gate Array (FPGA) or Application-Specific Integrated Circuit (ASIC).

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