



# Comparison in Honda Algorithm and Neural Network for Anti Cruise Collision Avoidance System

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**Abstract:** The need of security in transport system is necessary to prevent accidents. The automated approaches manage the speed of vehicles in accident prone situations. Anti Cruise Control (ACC) maintains a safe distance among two vehicles and does not halt the cars which is added benefit for traffic management. In this paper, two approaches are considered for anti cruise control: Honda Algorithm and Neural Network. Simulations show that the result of Honda Algorithm is better than NN for speed regulation and keeping the safe distance against the leading car. Neural Network is trained to produce desired throttle and brakes. Back Propagation and Radial Basis Neural Networks are implemented for this and the system is tested on MATLAB 2012 (b) SIMULINK model.

**Keywords:** Anti Cruise Control, Neural Network, Back Propagation, Radial Basis, Honda Algorithm, Speed.