

## **ABSTRACT**

As computing becomes more sophisticated, more complex calculations and algorithms become possible. One advancement that became possible were artificial neural networks, an algorithm architecture that attempts to emulate the how the human brain thinks and solve problems.

Artificial neural networks has many different applications, from image recognition to helping make decisions for self driving cars. This is done through layers of artificial neurons that communicate with each other and capable of adjusting certain parameters based on the situation at hand.

One of the possible applications is obstacle avoidance. While there are already algorithms that are capable of navigating through and around obstacles, a properly built neural networks has the potential of more efficient navigation and more flexibility when faced with different obstacles.

*Keyword: Artificial neural networks, neurons, obstacle avoidance*