# PROJECT REPORT

## JETSON STRAY CAT TRAP

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# ABSTRACT

*Stray cats are one of the wild animals that are pests for humans. Stray cats can cause toxo disease and the disease is very deadly. In recent times, advances in machine learning, especially in deep learning and artificial intelligence, have accelerated. In this case study, the author will make traps for stray cats in order to catch stray cats and reduce the risk of toxo disease with the best accuracy and efficiency. The results of this study have implications for the development of wild cat traps to help reduce the risk of toxo in the general public. On this research the authors create an opencv cat detection system with haarcascade_ frontalcatface.xml file datasets using nvidia jetson nano and micro servo, led lights, buzzer. This study aims to reducing the presence of stray cats carrying toxo virus disease and how capable is Jetson Nano's performance in carrying out this research. In this experiment is got results obtained were the real time cat detection is running well but the cpu task of jetson is getting 100% so the real time detection is getting laggy but still can running. The micro servo didn't work as well because the jetson performance is not sufficient to run the servo and buzzer together with the real time cat detection. The led light is working good but it little bit laggy same as real time cat detection.*

*Keyword: stray cats, opencv, nvidia jetson nano, micro servo, led lights, buzzer*