

**FLY ABOVE AND BEYOND: EQUIPPING, TESTING AND EVALUATING AN AERIAL
RESCUE DRONE CAPABLE OF HUMAN BODY DETECTION THROUGH ARTIFICIAL
INTELLIGENCE**

A Project Study Report

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ABSTRACT

Time is crucial when it comes to monitoring, search and rescue, etc. Therefore, a drone capable of making the monitoring side of the operation much easier will be very beneficial when it comes to reducing rescue time. This study aimed to develop a human body detecting AI and implement it into a drone's camera. The drone could then be used in many applications such as, search and rescue operations or security monitoring. A custom dataset of around 150 images was created and prepared for further training of the AI. Various models of the YOLO algorithm were studied carefully to fit the required dataset. The goal was to measure the accuracy and reliability of this AI in different scenarios. After several tests, the results obtained were accurate enough to be encouraged for search and rescue operations.