1. A Method of making a human detection and classification module comprising the steps of:

Taking the images of human agents in the crowded environment using continuous RGBD camera video input;

Feeding the individual image inputs taken by the camera through a FPGA board which have implemented a neural network that can do the feature extraction of images;

Using the features of the image identify the human agents’ bounding box of the image and using Yolo model to analyze the bounding box identify the class of human.

1. The neural network training on a annotated COCO image dataset of humans to identify same features from a unseen images.
2. Use Risc-V architecture for implement the processing controller of the FPGA board with contain 57 instructions.