Jun Hur and Haewoon Nam's study focused on distinguishing between human and animal targets using radar signals from the MAFAT Radar Challenge dataset, which comprises signals recorded by ground doppler pulse radar. These signals were segmented into 32 time-unit segments, each consisting of a 32x128 matrix, with each segment representing either a human or animal moving within the radar's range.The study employed three deep learning models for classification: CNN, U-Net, and Res-UNet. Their performance was evaluated based on their ability to correctly identify humans and animals.

The summarized results are:

|  |  |  |
| --- | --- | --- |
| Model Name | Human Accuracy | Animal Accuracy |
| CNN | 95.73% | 97.42% |
| U-Net | 98.26% | 95.25% |
| Res-UNet | 98.27% | 97.71% |
|  |  |  |

The Res-UNet model outperformed the others, underscoring its potential for enhancing radar target detection.

<https://ieeexplore-ieee-org.proxy.bib.uottawa.ca/document/9952676>