

Accepted Manuscript

Transferred Deep Learning Based Waveform Recognition for
Cognitive Passive Radar

Qing Wang, Panfei Du, Jingyu Yang, Guohua Wang, Jianjun Lei,
Chunping Hou

PII: S0165-1684(18)30325-6
DOI: <https://doi.org/10.1016/j.sigpro.2018.09.038>
Reference: SIGPRO 6949



To appear in: *Signal Processing*

Received date: 22 April 2018
Revised date: 14 September 2018
Accepted date: 30 September 2018

Please cite this article as: Qing Wang, Panfei Du, Jingyu Yang, Guohua Wang, Jianjun Lei, Chunping Hou, Transferred Deep Learning Based Waveform Recognition for Cognitive Passive Radar, *Signal Processing* (2018), doi: <https://doi.org/10.1016/j.sigpro.2018.09.038>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- A new two channel Convolutional Neural Network combining with Bi-directional Long Short-Term Memory achieves excellent performance for modulation recognition and protocol recognition.
- Transfer learning is firstly introduced in waveform recognition filed to solve the model transferability problem across different recognition tasks, which can efficiently save the 60% training time and 50% training data.
- A complete protocol signal dataset is provided for public research about waveform recognition in passive radar.

Download English Version:

<https://daneshyari.com/en/article/11023858>

Download Persian Version:

<https://daneshyari.com/article/11023858>

[Daneshyari.com](https://daneshyari.com)