

AI-Based Detection of Jamming Attacks In 6G Drone Networks

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Keywords: keyword 1; keyword 2; keyword 3 (List three to ten pertinent keywords specific to the article; yet reasonably common within the subject discipline.)

1. Introduction

The shift from 4G to 5G has been a generational leap has revolutionized connectivity around the world. Despite 5G being still in its early adoption rate at the time of writing[1], the research community is already working on the next generation of wireless communication technologies, 6G. 6G technology is expected to enable a wide variety of new use cases, thanks to the increases in both data rates and latency but this in turn will also bring forth new security challenges, specific to those applications.

One of the main differences between 5G and 6G technology will be the focus of the 6G standard in regards to AI integration. While Software Defined Networks (SDN) have played a key role in improving the efficiency and security of 5G networks, 6G is expected to take this a step further, by integrating artificial intelligence and machine learning directly into the network. This is what the authors of [2] define as the shift from *Softwarization* to *Intelligentization*.

AI integration in 6G networks will greatly strengthen the security of the network against security threats. By leveraging Diagnostic Analytics, a collection of insights into the status of the networks, security teams will be able to train specific AI models to detect and respond to security threats in real-time.

In this paper we will focus on a specific aspect of the security of 6G networks, namely the detection of jamming attacks in drone networks.

2. Materials and Methods

Materials and Methods should be described with sufficient details to allow others to replicate and build on published results. Please note that publication of your manuscript implicates that you must make all materials, data, computer code, and protocols associated with the publication available to readers. Please disclose at the submission stage any restrictions on the availability of materials or information. New methods and protocols

Citation: Cibecchini, S.; Chiti, F.; Lastname, F. AI-Based Detection of Jamming Attacks in 6G Drone Networks. *Future Internet* **2024**, *1*, 0. <https://doi.org/>

Received:

Revised:

Accepted:

Published:

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3.1. Subsection

3.1.1. Subsubsection

Bulleted lists look like this:

- First bullet;
- Second bullet;
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Numbered lists can be added as follows:

1. First item;
2. Second item;
3. Third item.

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All figures and tables should be cited in the main text as Figure 1, Table 1, etc.



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Table 1. This is a table caption. Tables should be placed in the main text near to the first time they are cited.

Title 1	Title 2	Title 3
Entry 1	Data	Data
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¹ Tables may have a footer.

The text continues here (Figure 2 and Table 2).

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Figure 2. This is a wide figure.

Table 2. This is a wide table.

Title 1	Title 2	Title 3	Title 4
Entry 1 *	Data	Data	Data
	Data	Data	Data
	Data	Data	Data
Entry 2	Data	Data	Data
	Data	Data	Data
	Data	Data	Data
Entry 3	Data	Data	Data
	Data	Data	Data
	Data	Data	Data
Entry 4	Data	Data	Data
	Data	Data	Data
	Data	Data	Data

* Tables may have a footer.

Text.
Text.

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3.3. *Formatting of Mathematical Components*

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This is the example 1 of equation:

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$$a = 1,$$

(1)

the text following an equation need not be a new paragraph. Please punctuate equations as regular text.

This is the example 2 of equation:

$$a = b + c + d + e + f + g + h + i + j + k + l + m + n + o + p + q + r + s + t + u + v + w + x + y + z$$

(2)

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Abbreviations

The following abbreviations are used in this manuscript:

MDPI	Multidisciplinary Digital Publishing Institute
DOAJ	Directory of open access journals
TLA	Three letter acronym
LD	Linear dichroism

Appendix A

Appendix A.1

The appendix is an optional section that can contain details and data supplemental to the main text—for example, explanations of experimental details that would disrupt the flow of the main text but nonetheless remain crucial to understanding and reproducing the research shown; figures of replicates for experiments of which representative data are shown in the main text can be added here if brief, or as Supplementary Data. Mathematical proofs of results not central to the paper can be added as an appendix.

Table A1. This is a table caption.

Title 1	Title 2	Title 3
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Entry 2	Data	Data

Appendix B

All appendix sections must be cited in the main text. In the appendices, Figures, Tables, etc. should be labeled, starting with “A”—e.g., Figure A1, Figure A2, etc.

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