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Article

## AI-Based Detection of Jamming Attacks in 6G Drone Networks

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This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation as well as the experimental conclusions that can be drawn.

3.1. Subsection

3.1.1. Subsubsection

Bulleted lists look like this:

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The text continues here.

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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
Entry 2	Data	Data <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Tables may have a footer.

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



**Figure 2.** This is a wide figure.

**Table 2.** This is a wide table.

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

<sup>\*</sup> Tables may have a footer.

Text.

Text.

3.3. Formatting of Mathematical Components

This is the example 1 of equation:

$$a=1, (1)$$

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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Please punctuate equations as regular text. Theorem-type environments (including propositions, lemmas, corollaries etc.) can be formatted as follows:

**Theorem 1.** *Example text of a theorem.* 

The text continues here. Proofs must be formatted as follows:

**Proof of Theorem 1.** Text of the proof. Note that the phrase "of Theorem 1" is optional if it is clear which theorem is being referred to.  $\Box$ 

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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

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
Entry 1	Data	Data
Entry 2	Data	Data

Appendix B

Appendix A.1

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References

- 1. Author 1, T. The title of the cited article. *Journal Abbreviation* **2008**, 10, 142–149.
- 2. Author 2, L. The title of the cited contribution. In *The Book Title*; Editor 1, F., Editor 2, A., Eds.; Publishing House: City, Country, 2007; pp. 32–58.
- 3. Author 1, A.; Author 2, B. Book Title, 3rd ed.; Publisher: Publisher Location, Country, 2008; pp. 154–196.
- 4. Author 1, A.B.; Author 2, C. Title of Unpublished Work. *Abbreviated Journal Name* year, phrase indicating stage of publication (submitted; accepted; in press).
- 5. Author 1, A.B. (University, City, State, Country); Author 2, C. (Institute, City, State, Country). Personal communication, 2012.
- 6. Author 1, A.B.; Author 2, C.D.; Author 3, E.F. Title of presentation. In Proceedings of the Name of the Conference, Location of Conference, Country, Date of Conference (Day Month Year); Abstract Number (optional), Pagination (optional).

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- 7. Author 1, A.B. Title of Thesis. Level of Thesis, Degree-Granting University, Location of University, Date of Completion.
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