



Article Title Journal of Design Intelligence

Firstname Lastname¹, Firstname Lastname², Firstname Lastname^{1,†}

¹Affiliation 1 School of xxx, University of xxx, city postcode, Country

²Affiliation 2 School of xxx, University of xxx, city postcode, Country

[†]E-mail: aaaa@email.cn

Received: xx xxxxx 2025 / Revised: xx xxxxx 2025 / Accepted: xx xxxxx 2025 / Published online: xx xxxxx 2025

Abstract: The abstract serves both as a general introduction to the topic and as a brief, non-technical summary of the main results and their implications. Authors are advised to check the author instructions for the journal they are submitting to for word limits and if structural elements like subheadings, citations, or equations are permitted.

Keywords: keyword 1; keyword 2; keyword 3

<https://doi.org/10.64509/jdi.11.xx>

1 Introduction

The Introduction section, of referenced text [1] expands on the background of the work (some overlap with the Abstract is acceptable). The introduction should not include subheadings.

The Introduction section, of referenced text [2] expands on the background of the work (some overlap with the Abstract is acceptable). The introduction should not include subheadings. The Introduction section, of referenced text [3] expands on the background of the work (some overlap with the Abstract is acceptable). The introduction should not include subheadings. The Introduction section, of referenced text [4] expands on the background of the work (some overlap with the Abstract is acceptable). The introduction should not include subheadings.

References should be numbered in order of appearance and indicated by a numeral or numerals in square brackets—e.g., [1] or [2,3], or [4–6].

JDI does not impose a strict layout as standard however authors are advised to check the individual requirements for the journal they are planning to submit to as there may be journal-level preferences. When preparing your text please also be aware that some stylistic choices are not supported in full text XML (publication version), including coloured font. These will not be replicated in the typeset article if it is accepted.

2 Method

In this section, the author should provide a detailed description of the methods used in the article. Topical subheadings are allowed. Authors must ensure that their Methods section includes adequate experimental and characterization data necessary for others in the field to reproduce their work. Authors are encouraged to include RIIDs where appropriate.

Ethical approval declarations (only required where applicable) Any article reporting experiment/s carried out on (i) live vertebrate (or higher invertebrates), (ii) humans or (iii) human samples must include an unambiguous statement within the methods section that meets the following requirements:

1. Approval: a statement which confirms that all experimental protocols were approved by a named institutional and/or licensing committee. Please identify the approving body in the methods section
2. Accordance: a statement explicitly saying that the methods were carried out in accordance with the relevant guidelines and regulations
3. Informed consent (for experiments involving humans or human tissue samples): include a statement confirming that informed consent was obtained from all participants and/or their legal guardian/s

[†] Corresponding author: Firstname Lastname

* Academic Editor: Firstname Lastname

© 2025 The authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

3 Experiments

3.1 Subsection Title 1

Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text.

3.1.1 Equations

Equations in \LaTeX can either be inline or on-a-line by itself (“display equations”). For inline equations use the $\$ \dots \$$ commands. E.g.: The equation $H\psi = E\psi$ is written via the command $\$H \backslash psi = E \backslash psi\$$.

For display equations (with auto generated equation numbers) one can use the equation or align environments:

$$\|\tilde{X}(k)\|^2 \leq \frac{\sum_{i=1}^p \|\tilde{Y}_i(k)\|^2 + \sum_{j=1}^q \|\tilde{Z}_j(k)\|^2}{p+q}. \quad (1)$$

where,

$$\begin{aligned} D_\mu &= \partial_\mu - ig \frac{\lambda^a}{2} A_\mu^a \\ F_{\mu\nu}^a &= \partial_\mu A_\nu^a - \partial_\nu A_\mu^a + g f^{abc} A_\mu^b A_\nu^a \end{aligned} \quad (2)$$

Notice the use of `\nonumber` in the align environment at the end of each line, except the last, so as not to produce equation numbers on lines where no equation numbers are required. The `\label{ }` command should only be used at the last line of an align environment where `\nonumber` is not used.

$$Y_\infty = \left(\frac{m}{\text{GeV}} \right)^{-3} \left[1 + \frac{3 \ln(m/\text{GeV})}{15} + \frac{\ln(c_2/5)}{15} \right] \quad (3)$$

The class file also supports the use of `\mathbb{}`, `\mathscr{}` and `\mathcal{}` commands. As such `\mathbb{R}`, `\mathscr{R}` and `\mathcal{R}` produces \mathbb{R} , \mathscr{R} and \mathcal{R} respectively (refer Subsubsection 3.1.1).

3.1.2 Tables

Most tables are one column wide or one page wide. Tables can be inserted via the normal table and tabular environment.

Table 1: Table title

Column 1	Column 2	Column 3	Column 4
row 1	data 1	data 2	data 3
row 2	data 4	data 5 ^a	data 6
row 3	data 7	data 8	data 9 ^b

Source: This is an example of table footnote. This is an example of table footnote.

^a Example for a first table footnote. This is an example of table footnote.

^b Example for a second table footnote. This is an example of table footnote.

3.1.3 Figures

The figures in the article can visually display the experimental data, models, methods and conclusions. For an article, figures

are necessary. The acceptable format for the figures including (but not limited to) tif, jpg, png and PDF. The suggested minimum resolution of 600 dpi. The font size in the figures is Times New Roman, 10.5pt, and the suggested figures width is 8.6cm or 17.2cm.

The main text must cite each figure in the correct sequence. All images must have a caption. For figures with the subfigures, the panels should be labeled (a), (b), (c), (d), etc., and each part can be separately cited in the main text. Each subfigure must be individually described in the caption.



Figure 1: This is a figure. This is an example of long caption for the figure.

```
\begin{figure}[<placement-specifier>]
\centering
\includegraphics{<eps-file>}
\caption{<figure-caption>}
\label{<figure-label>}
\end{figure}
```

3.1.4 Algorithms, Program codes and Listings

Packages `algorithm`, `algorithmicx` and `algpseudocode` are used for setting algorithms in \LaTeX using the format:

```
\begin{algorithm}
\caption{<alg-caption>}\label{<alg-label>}
\begin{algorithmic}[1]
. . .
\end{algorithmic}
\end{algorithm}
```

You may refer above listed package documentations for more details before setting `algorithm` environment. For program codes, the “verbatim” package is required and the command to be used is `\begin{verbatim} ... \end{verbatim}`.

Similarly, for listings, use the `listings` package. `\begin{lstlisting} ... \end{lstlisting}` is used to set environments similar to `verbatim` environment. Refer to the `listings` package documentation for more details.

A fast exponentiation procedure:

```

begin
  for i:=1 to 10 step 1 do
    expt(2,i);
    newline() od
  Comments will be set flush to the right margin
where
proc expt(x,n) ≡
  z:=1;
  do if n=0 then exit fi;
  do if odd(n) then exit fi;
  comment: This is a comment statement;
  n:=n/2; x:=x*x od;
  { n>0 };
  n:=n-1; z:=z*x od;
  print(z).
end

```

Algorithm 1 Calculate $y = x^n$

Require: $n \geq 0 \vee x \neq 0$

Ensure: $y = x^n$

```

1:  $y \leftarrow 1$ 
2: if  $n < 0$  then
3:      $X \leftarrow 1/x$ 
4:      $N \leftarrow -n$ 
5: else
6:      $X \leftarrow x$ 
7:      $N \leftarrow n$ 
8: end if
9: while  $N \neq 0$  do
10:    if  $N$  is even then
11:         $X \leftarrow X \times X$ 
12:         $N \leftarrow N/2$ 
13:    else [ $N$  is odd]
14:         $y \leftarrow y \times X$ 
15:         $N \leftarrow N - 1$ 
16:    end if
17: end while

```

```
for i:=maxint to 0 do
begin
{ do nothing }
end;
Write( 'Case■insensitive■' );
Write( 'Pascal■keywords.■' );
```

4 Cross Referencing

Environments such as figure, table, equation and align can have a label declared via the `\label{#label}` command.

For figures and table environments use the `\label{}` command inside or just below the `\caption{}` command. You can then use the `\ref{#label}` command to cross-reference them. As an example, consider the label declared for Figure 1 which is `\label{fig1}`. To cross-reference it, use the command `Figure \ref{fig1}`, for which it comes up as “Figure 1”.

To reference line numbers in an algorithm, consider the label declared for the line number 2 of Algorithm 1 is `\label{algln2}`. To cross-reference it, use the command `\ref{algln2}` for which it comes up as line 2 of Algorithm 1.

4.1 Details on Reference Citations

Standard L^AT_EX permits only numerical citations. To support both numerical and author-year citations this template uses natbib L^AT_EX package. For style guidance please refer to the template user manual.

Here is an example for `\cite{...}`: [?]. Another example for `\citep{...}`: [?]. For author-year citation mode, `\cite{...}` prints Jones et al. (1990) and `\citep{...}` prints (Jones et al., 1990).

All cited bib entries are printed at the end of this article:
[1], [2], [3], [4], [5], [5], [6], and [8].

5 Examples for Theorem Like Environments

For theorem like environments, we require `amsthm` package. There are three types of predefined theorem styles exists—`thmstyleone`, `thmstyletwo` and `thmstylethree`

thmstyleone	Numbered, theorem head in bold font and theorem text in italic style
thmstyletwo	Numbered, theorem head in roman font and theorem text in italic style
thmstylethree	Numbered, theorem head in bold font and theorem text in roman style

For mathematics journals, theorem styles can be included as shown in the following examples:

[illegible]

Sample body text. Sample body text. Sample body text.
Sample body text. Sample body text. Sample body text.
Sample body text. Sample body text.

Proposition 2 *Example proposition text. Example proposition text. Example proposition text. Example proposition text. Example proposition text.*

Example proposition text. Example proposition text. Example proposition text.

Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text.

Example 1 Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem.

Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text.

Remark 1 Phasellus adipiscing semper elit. Proin fermentum massa ac quam. Sed diam turpis, molestie vitae, placerat a, molestie nec, leo. Maecenas lacinia. Nam ipsum ligula, eleifend at, accumsan nec, suscipit a, ipsum. Morbi blandit ligula feugiat magna. Nunc eleifend consequat lorem.

Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text.

Definition 1 (Definition sub head) Example definition text. Example definition text. Example definition text. Example definition text. Example definition text. Example definition text.

Additionally a predefined “proof” environment is available: `\begin{proof} ... \end{proof}`. This prints a “Proof” head in italic font style and the “body text” in roman font style with an open square at the end of each proof environment.

Proof Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. □

Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text. Sample body text.

Proof of Theorem 1 Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. Example for proof text. □

For a quote environment, use

`\begin{quote} ... \end{quote}`

Quoted text example. Aliquam porttitor quam a lacus. Praesent vel arcu ut tortor cursus volutpat. In vitae pede quis diam bibendum placerat. Fusce elementum convallis neque. Sed dolor orci, scelerisque ac, dapibus nec, ultricies ut, mi. Duis nec dui quis leo sagittis commodo.

Sample body text. Sample body text. Sample body text. Sample body text. Sample body text (refer Figure 1). Sample body text. Sample body text.

6 Discussion

Discussions should be brief and focused. In some disciplines use of Discussion or ‘Conclusion’ is interchangeable. It is not mandatory to use both. Some journals prefer a section ‘Results and Discussion’ followed by a section ‘Conclusion’. Please refer to Journal-level guidance for any specific requirements.

7 Conclusion

Conclusions may be used to restate your hypothesis or research question, restate your major findings, explain the relevance and the added value of your work, highlight any limitations of your study, describe future directions for research and recommendations.

In some disciplines use of Discussion or ‘Conclusion’ is interchangeable. It is not mandatory to use both. Please refer to Journal-level guidance for any specific requirements.

Supplementary Information

If your article has accompanying supplementary file/s please state so here.

Authors reporting data from electrophoretic gels and blots should supply the full unprocessed scans for key as part of their Supplementary information. This may be requested by the editorial team/s if it is missing.

Please refer to Journal-level guidance for any specific requirements.

Funding

This work is supported by xxx.

Author Contributions

For research articles with several authors, a short paragraph specifying their individual contributions must be provided. The following statements should be used “Conceptualization, X.X. and Y.Y.; methodology, X.X.; software, X.X.; validation, X.X., Y.Y. and Z.Z.; formal analysis, X.X.; investigation, X.X.; resources, X.X.; data curation, X.X.; writing—original draft preparation, X.X.; writing—review and editing, X.X.; visualization, X.X.; supervision, X.X.; project administration, X.X.; funding acquisition, Y.Y. All authors have read and agreed to the published version of the manuscript.

Conflict of Interest

All the authors declare that they have no conflict of interest.

Data Available

The data and materials used in this study are available upon request from XXX.

Ethical Approval

If any of the sections are not relevant to your manuscript, please include the heading and write ‘Not applicable’ for that section.

Acknowledgements

Acknowledgements are not compulsory. Where included they should be brief. Grant or contribution numbers may be acknowledged.

References

- [1] Liu, L., Lu, S., Zhong, R., Wu, B., Yao, Y., Zhang, Q., Shi, W.: Computing systems for autonomous driving: State of the art and challenges. *IEEE Internet of Things Journal* **8**(8), 6469–6486 (2020) <https://doi.org/10.1109/JIOT.2020.3043716>
- [2] Chen, Z., Zhang, Z., Yang, Z.: Big AI models for 6G wireless networks: Opportunities, challenges, and research directions. *IEEE wireless communications* **31**(5), 164–172 (2024)
- [3] Latif, S. A., Wen, F. B. X., Iwendi, C., Wang, L. L. F., Mohsin, S. M., Han, Z., Band, S. S.: AI-empowered, blockchain and SDN integrated security architecture for IoT network of cyber physical systems. *Computer communications* **181**, 274–283 (2022)
- [4] Geiger, A., Lenz, P., Urtasun, R.: Are we ready for autonomous driving? the kitti vision benchmark suite. In 2012 IEEE conference on computer vision and pattern recognition, pp. 3354–3361 (2012). IEEE
- [5] Zhang, H., Xu, S., Xin, J., Xiong, S.: Architectures and Use cases of AI-based Network. In 2021 13th International Conference on Advanced Infocomm Technology (ICAIT), pp. 219–223 (2021)
- [6] Mujahid, M., Hossain, M.S., Khan, A., Huang, Z.: Seam carving empowered by reinforcement learning for optimal content preservation. In International Conference on Computer Animation and Social Agents, pp.441–455 (2024). Springer
- [7] Hendrycks, D., Gimpel, K.: A baseline for detecting misclassified and out-of-distribution examples in neural networks. *arXiv preprint arXiv:1610.02136* (2016)
- [8] Santos, O., Salam, S., Dahir, H.: The AI revolution in networking, cybersecurity, and emerging technologies, 2nd edn., Addison-Wesley Professional (2024)

A Experiment Details

Appendices contain information that supplements the text but would be distracting or inappropriate to include in the text itself. Appendices are not required. The number of appendices in a paper will vary depending on the needs of the work.

B More Analysis of ID Semantic-Relevant Regions

Appendices most often consist of text, tables, or figures, or a combination of these.