

# How to prepare a JOT manuscript: a users guide

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**ABSTRACT** This document illustrates how to prepare a manuscript to be submitted to the Journal of Object Technology by using the `jot.cls` (v2.4 released on 26 Oct, 2020) class style.

**KEYWORDS** Typesetting,  $\LaTeX$  JOT format style.

## 1. Introduction

This documentation describes the  $\LaTeX$  document class for typesetting JOT manuscripts. For an extensive introduction to  $\LaTeX$  please refer to (Lamport 1994).

The JOT class `jot.cls` is based on the  $\LaTeX$  `article.cls` class, and as such it preserves all the commands, including the standard sectioning, floats, formulas and so on. In addition, a number of JOT-specific commands are provided.

Please always use the commands provided, and do not try to redefine them as this would compromise the integrity of the document's presentation.

## 2. Installing the JOT style class

The installation of the JOT style class is straightforward: just include the file `jot.cls` in the main folder of your manuscript, i.e., the folder where the main  $\LaTeX$  file is located.

## 3. Setting the document type

A JOT manuscript is a two-column, double sided article that uses the Times 10pt font. To initialize the document just use the following command:

```
\documentclass[lineno]{jot}
```

### JOT reference format:

Alfonso Pierantonio, Mark van den Brand, and Benoit Combemale. *How to prepare a JOT manuscript: a users guide*. Journal of Object Technology. Vol. vv, No. nn, yyyy. Licensed under Attribution 4.0 International (CC BY 4.0) <http://dx.doi.org/10.5381/jot.yyyy.vv.nn.aa>

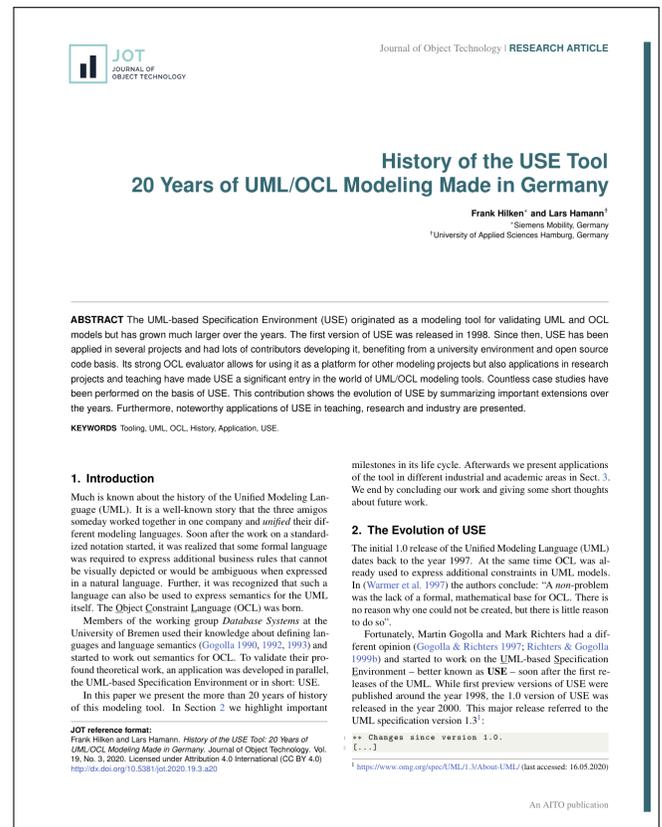


Figure 1 The title page of a JOT manuscript.

the parameter `lineno` must be removed only in the camera-ready version of the paper. The first page of the manuscript

looks as illustrated in Fig. 1<sup>1</sup>.

## 4. Heading

In this section, we describe the commands available for defining the heading section of a JOT manuscript, i.e., all the content that comes before the abstract.

### 4.1. Title

To set the title of your manuscript use the `title` command:

```
\title{<your title>}
```

A JOT manuscript does not have a subtitle.

### 4.2. Authors

Information about the paper authors is should be given as follows:

```
\author[<superscript symbol>]{<author>}
```

for instance, the following commands define the authors of the paper shown in Fig. 2.

```
\author[$\ast$]{Patrick M. Hanrahan}  
\author[$\dagger$]{Yann LeCun}  
\author[$\ddagger$]{David Patterson}  
\author[$\S$]{John L. Hennessy}  
\author[$\ast\ast$]{Martin Hellman}
```

In case all the authors share the same affiliation, the superscript symbol must be removed as follows:

```
\author{Patrick M. Hanrahan}  
\author{Yann LeCun}  
\author{David Patterson}  
\author{John L. Hennessy}  
\author{Martin Hellman}
```

### 4.3. Authors' affiliations

The affiliation of authors must be entered using the `affil` command:

```
\affil[<superscript symbol>]{<author affiliation>}
```

making sure to have the `<superscript symbol>` corresponds to the same symbol as in the author definition. For example:

```
\affil[$\ast$]{Stanford University, USA}  
\affil[$\dagger$]{New York University, USA}  
\affil[$\ddagger$]{University of California, USA}  
\affil[$\S$]{Stanford University, USA}  
\affil[$\ast\ast$]{Stanford University, USA}
```

Also in this case if all the authors share the same affiliation, the superscript symbol must be removed, as follows:

```
\affil{Stanford University, USA}
```

These commands, together with the author entries given above, produce the author heading illustrated in Fig. 2. The affiliation should comprise the following data:

<sup>1</sup> Please note that the current document is a *manual* and as such is denoted by a different header color.

- `name`,
- `city`, and
- `country`

the city can be omitted in case the institution is world renowned, does not have a specific address, or is comprehended in the name of the institution (e.g., Università degli Studi dell'Aquila).

### 4.4. Footnotes in the paper heading

Footnotes in the paper title, authors or affiliations are not allowed.

### 4.5. Running head

In contrast with `article.cls`, the running head is not automatically produced by the `\maketitle` command. The running head information must be explicitly defined with the following commands:

```
\runningtitle{<title>} % for use in the internal pages  
\runningauthor{<author(s)>}
```

with

- `\runningauthor{<author>}`, if there is only one author;
- `\runningauthor{<author1> and <author2>}`, if there are two authors;
- `\runningauthor{<author1> \textit{et al}}`, if there are more than two authors.

### 4.6. Producing the header

After entering the `\author`, `\affil`, `\runningtitle`, and `\runningauthor` described in this section, you must enter the `\maketitle` command otherwise the heading won't be produced.

In order to reproduce all the information, the following list of commands must be entered

```
\maketitle  
\urlstyle{rm}
```

## 5. Abstract and keywords

The abstract and the keywords are managed as in the `article.cls` class style, as follows

```
\begin{abstract}  
  <the abstract text goes here>  
\end{abstract}  
\keywords{%  
  first keyword,  
  second keyword,  
  more keywords.}
```

### Some of the most recent Turing Awards

Patrick M. Hanrahan<sup>\*</sup>, Yann LeCun<sup>†</sup>, David Patterson<sup>‡</sup>, John L. Hennessy<sup>§</sup>, and Martin Hellman<sup>\*\*</sup>  
<sup>\*</sup>Stanford University, USA  
<sup>†</sup>New York University, USA  
<sup>‡</sup>University of California, USA  
<sup>§</sup>Stanford University, USA  
<sup>\*\*</sup>Stanford University, USA  
<sup>\*\*\*</sup>Università degli Studi dell'Aquila, Italy

Figure 2 An example of paper heading.

Each keyword must start with a capital letter and separated from the other with a comma.

## 6. Metadata and article type

Each published JOT manuscript is endowed with metadata that are provided after the acceptance notification.

### 6.1. Metadata definition

While preparing the camera ready the following command must be entered with the correct information

```
\jotdetails{%
  volume=<volumenumber>,
  number=<issue number>,
  articleno=<article number>,
  year=<year>,
  license=<license code>}
```

where

- `articleno` can be either
  - `a1`, `a2` and so on for regular contributions, or
  - `e1` for editorials (typically one per issue);
- `license` can be either
  - `ccby`, for the CC BY 4.0,
  - `ccbynd`, for the CC BY-ND 4.0, or
  - `ccbyncnd` for the CC BY-NC-ND 4.0.

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### 6.2. Article type

Different kinds of manuscripts can be published in JOT. In particular, the following article types are admissible<sup>2</sup>

- research contributions, i.e., peer-reviewed articles
- editorials, i.e., articles written by the journal editors-in-chief that proposes visions and positions of interest for the journal audience.

The style of the article is typographically characterized according to the type. The syntax for specifying the article type is the following:

```
\articletype{<type>}
```

where `type` can be either

- `regular`, or
- `editorial`

<sup>2</sup> Additional types exist, but they are mainly used for internal purposes, such as *manuals* like this document.

## 1. Lorem Ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis convallis dictum mollis. Sed eleifend tincidunt cursus.

### 1.1. Lorem Ipsum

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis convallis dictum mollis. Sed eleifend tincidunt cursus.

**1.1.1. Lorem Ipsum** Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis convallis dictum mollis. Sed eleifend tincidunt cursus.

**Lorem Ipsum** Lorem ipsum dolor sit amet, consectetur adipiscing elit. Duis convallis dictum mollis. Sed eleifend tincidunt cursus.

Figure 3 Formats of section headings.

## 7. Acknowledgments

While the acknowledgments are not part of the paper heading, they are usually entered in the preamble of after the abstract although they are printed right before the References section. The syntax is the following:

```
\acknowledgment{<acknowledgment text>}
```

Alternatively, the following command aliases can be used

```
\acknowledgments
\acknowledgement
\acknowledgements
```

with the same behaviour as `\acknowledgment`.

## 8. Author short bio

A short bio of the authors (in the same order as in the title) must be included at the end of the paper, after the references, as follows:

```
\section*{About the authors}
\shortbio{<author>}{%
  <short bio>
  \authorcontact[homepage]{email}}
```

where `\authorcontact` is used to provide the `homepage` (optional) and the `email`.

## 9. Sectioning

As in the `article.cls` class, `jot.cls` offers the following sectioning commands

- `\section{<section title>}`
- `\subsection{<subsection title>}`
- `\subsubsection{<subsubsection title>}`
- `\paragraph{<paragraph title>}`

For instance, an example of sectioning with the previous commands is illustrated in Fig. 3.

## 10. Figures, Tables and listings

The `jot.cls` class supports `{figure}`, `{figure*}` (two column wide figure), `{table}`, `{table*}`, and `{tabular}` environments. In addition, the `{listing}` environment is provided by default, which means that there is no need to import the package in the main TeX file.

### 10.1. Tables

The `jot.cls` class style supports the `{table}`, `{table*}`, and `{tabular}` environments. A recommendation of how tables should be displayed is shown in Table 1. In this example the table spans along the two columns, to show how the `{table*}` environment works.

Moreover, tables in all JOT manuscripts should conform to the following guidelines:

- the header font is `\textbf`,
- the font in the cells is `\normalfont`,
- there are not external left and right border lines
- all the other lines are single, and finally
- the bottom border in the header is a double line.

### 10.2. Figures

The `{figure}` and `{figure*}` environments work exactly as those defined in the `article.cls` class style.

### 10.3. Listings

Code listings are produced with the `listings` package that is pre-loaded and pre-configured by the `jot.cls` class, and therefore it is not necessary to import it.

Listing 1 shows an example of a Python program that displays the Fibonacci sequence.

```
1 # Python program to display the Fibonacci
   sequence
2 def recur_fibo(n):
3     if n <= 1:
4         return n
5     else:
6         return(recur_fibo(n-1) + recur_fibo(n-2))
7 nterms = 10
8 # check if the number of terms is valid
9 if nterms <= 0:
10    print("Plese enter a positive integer")
11 else:
12    print("Fibonacci sequence:")
13    for i in range(nterms):
14        print(recur_fibo(i))
```

**Listing 1** Displaying the Fibonacci sequence in Python.

The  $\LaTeX$  code fragment that produces Listing 1 is the following:

```
\begin{lstlisting}[
  language=Python,
  caption=Fibonacci sequence.]
# Python program to display the Fibonacci sequence
def recur_fibo(n):
    if n <= 1:
        return n
    else:
```

```
        return(recur_fibo(n-1) + recur_fibo(n-2))
nterms = 10
# check if the number of terms is valid
if nterms <= 0:
    print("Plese enter a positive integer")
else:
    print("Fibonacci sequence:")
    for i in range(nterms):
        print(recur_fibo(i))
\end{lstlisting}
```

The listing can also span over the two column by adding the following option

```
float=*
```

The outcome is shown in Listing 2.

## 11. Getting the JOT $\LaTeX$ template

The JOT  $\LaTeX$  template can be obtained from the JOT website<sup>3</sup> under the section "author" where the submission guidelines are given.

### Acknowledgments

We would like to thank the reviewers of this document template for their helpful comments and suggestions.

### References

Lamport, L. (1994). *Latex: a document preparation system: user's guide and reference manual*. Addison-Wesley.

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<sup>3</sup> <http://www.jot.fm>

| Year | Recipient        | Rationale   |
|------|------------------|---|
| 2019 | Pat Hanrahan     | For fundamental contributions to 3-D computer graphics, and the revolutionary impact of these techniques on computer-generated imagery (CGI) in filmmaking and other applications |
|      | Edwin Catmull    |   |
| 2018 | Yann LeCun       | For conceptual and engineering breakthroughs that have made deep neural networks a critical component of computing  |
|      | Geoffrey Hinton  |   |
|      | Yoshua Bengio    |   |
| 2017 | David Patterson  | For pioneering a systematic, quantitative approach to the design and evaluation of computer architectures with enduring impact on the microprocessor industry                     |
|      | John L. Hennessy |   |
| 2016 | Tim Berners-Lee  | For inventing the World Wide Web, the first web browser, and the fundamental protocols and algorithms allowing the Web to scale   |

**Table 1** Recent recipients of the Turing Award.

```

1 # Python program to display the Fibonacci sequence
2 def recur_fibo(n):
3     if n <= 1:
4         return n
5     else:
6         return(recur_fibo(n-1) + recur_fibo(n-2))
7 nterms = 10
8 # check if the number of terms is valid
9 if nterms <= 0:
10    print("Plese enter a positive integer")
11 else:
12    print("Fibonacci sequence:")
13    for i in range(nterms):
14        print(recur_fibo(i))

```

**Listing 2** Displaying the Fibonacci sequence in Python.