

How to Use L^AT_EX 2_ε Class File (ieice-tecrep.cls) for IEICE Technical Report

Guide to IEICE Technical Report

Hanako DENSHI[†], Jiro JOHO^{††}, and Ichiro TSHUSIN^{††}

[†] Faculty of Engineering, First University
Yamada 1–2–3, Minato-ku, Tokyo, 105–0123 Japan

^{††} R&D Division, Osaka Corporation
Kawada 4–5–6, Suita-shi, 565–0456 Japan

E-mail: [†]hanako@denshi.ac.jp, ^{††}{taro,jiro}@jouhou.co.jp

Abstract IEICE (the Institute of Electronics, Information and Communication Engineers) provides a L^AT_EX 2_ε class file, named ieice-tecrep.cls, for IEICE Technical Report. This document describes how to use the class file.

Key words technical report, L^AT_EX 2_ε class file, template

1. Introduction

This document describes how to handle the class file (ieice-tecrep.cls) for IEICE Technical Report. Section 2 explains how to typeset a paper according to the template, template.tex which is distributed with the ieice-tecrep.cls.

2. Template and How to Typeset

Here is the template of the paper.

```
\documentclass{ieice-tecrep}
\tecrepyear{2023}
\title{Title}
\subtitle{Subtitle}
\authorlist{%
  \authoreentry[hanako@denshi.ac.jp]
    {Hanako DENSHI}{Tokyo}
  \authoreentry[taro@jouhou.co.jp]
    {Jiro JOHO}{Osaka}
  \authoreentry[jiro@jouhou.co.jp]
    {Ichiro TSHUSIN}{Osaka}
}
\affiliate[Tokyo]{Faculty of Engineering,
  First University\hskip1em
  Yamada 1--2--3, Minato-ku, Tokyo,
  105--0123 Japan}
\affiliate[Osaka]{%
  R\&D Division, Osaka Corporation\hskip1em
  Kawada 4--5--6, Suita-shi,
  565--0456 Japan}
\begin{document}
\begin{abstract}
summary
\end{abstract}
\begin{keyword}
keywords
\end{keyword}
```

```
\maketitle
\section{Introduction}
...
\begin{thebibliography}{99}
\bibitem{}
\bibitem{}
...
\end{thebibliography}
\appendix
\section{}
...
\ack
```

- The year in which the manuscript will be published should be specified in \tecrepyear.
- Title and subtitle should be specified in \title and \subtitle, respectively.
- Outputs of authors' names, affiliations, marks of affiliations and E-mail addresses are automatically generated by using the \authorlist and \authoreentry commands.

\authoreentry command should be described as an argument of the \authorlist command.

\authoreentry command has three arguments.

```
\authorlist{%
  \authoreentry[mail address]{name}{label}
}
```

- The first argument of \authoreentry is filled with an author's mail address. Only one mail address is allowed. The first argument '[' could be omitted, if you do not want your email address to be published or have no mail address. However, when some author has no mail address in the case of multiple authors, the first argument cannot be omitted.

If there is a underscore character '_' in mail address, type '_' as follows.

```
\noexpand\noexpand\noexpand\_
```

If you do not satisfy with an output of a list of mail

addresses or an error occurs, you can type it directly as follows.

`\MailAddress{$\dagger$name@xx.yy.zz.jp}`

- The second argument of `\authoreentry` is filled with an author’s name.

The family name might be described in uppercase letters. However, this command automatically capitalizes characters after a first space. If you have a middle name, connect a first and a middle name with ‘~’ (tilde) to handle the middle name rightly as follows.

`\authoreentry[] {Moo~Hyun ROH} {label}`

- The third argument should be specified by ‘label’ of an author’s affiliation, corresponding to ‘label’ of the `\affiliate` command (see below). For example, an abbreviation for a university, institute or company can be given. If you have multiple affiliations, labels should be specified as a comma separated list without any spaces.

Do not include extra spaces before or after ‘label’. `{Tokyo}`, `{_Tokyo}` and `{Tokyo_}` will be judged to be different.

If some author has no affiliation, ‘label’ should be ‘none’.

- You may use the `\breakauthorline` command, if you would like to break a line of author’s list.

`\breakauthorline{3}`

When ‘3’ is specified, the line-break will be occurred after a third author. Multiple numerals might be specified as a comma separated list.

- Author’s affiliation should be described in the `\affiliate` command as follows.

`\affiliate[label] {office\hskip1em address}`

The first argument ‘label’ must be the same as the third argument of the `\authoreentry` command. No extra spaces may be added between a letter and a brace.

The second argument is filled with an author’s affiliation.

The entry of `\affiliate` must be put in the same order as labels of `\authoreentry` lists.

If some label of `\affiliate` is different from any labels of `\authoreentry`, there will come a warning message on your terminal.

- Abstract and Key words are described in the `abstract` and the `keyword` environment, respectively.
- The `\appendix` command provided by the standard $\text{\LaTeX 2}_{\epsilon}$ is only a declaration that changes the way sectional units etc. are numbered. But `\appendix` commands provided by `ieice-tecrep.cls` will generates “**Appendix**”.

For example, once it is declared, equation and float etc. are numbered “A·1”, “A·2”,

- The `\ack` command will generates “**Acknowledgements**”.