#### Paper Title

Firstname Lastname and Firstname Lastname

Institute

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**Keywords:** keyword1, keyword2

#### 1 Introduction

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Nulla malesuada porttitor diam. Donec felis erat, congue non, volutpat at, tincidunt tristique, libero. Vivamus viverra fermentum felis. Donec nonummy

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pellentesque ante. 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. Sed lacinia nulla vitae enim. Pellentesque tincidunt purus vel magna. Integer non enim. Praesent euismod nunc eu purus. Donec bibendum quam in tellus. Nullam cursus pulvinar lectus. Do

The remainder of the paper starts with a presentation of related work (Sect. 2). It is followed by a presentation of hints on LATEX (Sect. 3). Finally, a conclusion is drawn and outlook on future work is made (Sect. 4).

#### 2 Related Work

Winery [2] is a graphical modeling tool. The whole idea of TOSCA is explained by Binz et al. [1].

#### 3 LaTeX Hints

This section contains hints on writing LaTeX. It focuses on minimal examples, which can be directly adapted to the content

#### 3.1 Handling of paragraphs

One sentence per line. This rule is important for the usage of version control systems. A new line is generated with a blank line. As you would do in Word: New paragraphs are generated by pressing enter. In LaTeX, this does not lead to a new paragraph as LaTeX joins subsequent lines. In case you want a new paragraph, just press enter twice (!). This leads to an empty line. In word, there is the functionality to press shift and enter. This leads to a hard line break. The text starts at the beginning of a new line. In LaTeX, you can do that by using two backslashes (\\).

This is rarely used.

Please do *not* use two backslashes for new paragraphs. For instance, this sentence belongs to the same paragraph, whereas the last one started a new one. A long motivation for that is provided at http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3.

#### Corresponding LATEX code of paper-minted.tex $_{\rm 414}$ One sentence per line. $_{ m 415}$ This rule is important for the usage of version control $\hookrightarrow$ systems. 416 A new line is generated with a blank line. 417 As you would do in Word: $_{\rm 418}$ New paragraphs are generated by pressing enter. 419 In LaTeX, this does not lead to a new paragraph as LaTeX $\rightarrow$ joins subsequent lines. 420 In case you want a new paragraph, just press enter twice (!). $_{\rm 421}$ This leads to an empty line. $_{422}$ In word, there is the functionality to press shift and enter. 423 This leads to a hard line break. $_{424}$ The text starts at the beginning of a new line. 425 In LaTeX, you can do that by using two backslashes 426 This is rarely used. 428 Please do \textit{not} use two backslashes for new $\hookrightarrow$ paragraphs. 429 For instance, this sentence belongs to the same paragraph, $\hookrightarrow$ whereas the last one started a new one.

→ \url{http://loopspace.mathforge.org/HowDidIDoThat/TeX/VCS/#section.3}.

#### 3.2 Hyphenation

LATEX automatically hyphenates words. When using microtype, there should be less hypnetations than in other settings. It might be necessary to tweak the hyphenations nevertheless. Here are some hints:

430 A long motivation for that is provided at

In case you write "application-specific", then the word will only be hyphenated at the dash. You can also write applica\allowbreak{}tion-specific (result: application-specific), but this is much more effort.

You can now write words containing hyphens which are hyphenated at other places in the word. For instance, application"=specific gets application"=specific. This is enabled by an additional configuration of the babel package.

# Corresponding IATEX code of paper-minted.tex 441 In case you write \enquote{application-specific}, then the \$\to\$ word will only be hyphenated at the dash. 442 You can also write \verblapplica\allowbreak{}tion-specific1 \$\to\$ (result: applica\allowbreak{}tion-specific), but this is \$\to\$ much more effort. 443 444 You can now write words containing hyphens which are \$\to\$ hyphenated at other places in the word. 45 For instance, \verblapplication"=specific1 gets \$\to\$ application"=specific. 46 This is enabled by an additional configuration of the babel \$\to\$ package.

#### 3.3 Typesetting Units

Numbers can written plain text (such as 100), by using the siunitx package like that:  $100 \frac{\text{km}}{\text{h}}$ , or by using plain LATEX (and math mode):  $100 \frac{\text{km}}{\text{h}}$ .

```
Corresponding LATEX code of paper-minted.tex

Numbers can written plain text (such as 100), by using the

siunitx package like that:

SI{100}{\km\per\hour},

or by using plain \LaTeX{} (and math mode):

$100 \frac{\mathit{km}}{h}$.
```

5% of  $10 \,\mathrm{kg}$ 

```
Corresponding LATEX code of paper-minted.tex

459 \SI{5}{\percent} of \SI{10}{kg}
```

Numbers are automatically grouped: 123456.

```
Corresponding LATEX code of paper-minted.tex

463 Numbers are automatically grouped: \num{123456}.
```

#### 3.4 Surrounding Text by Quotes

Please use the "enquote command" to quote something. Quoting with "quote" or "quote" also works.

```
Corresponding LATEX code of paper-minted.tex

469 Please use the \enquote{enquote command} to quote something.
470 Quoting with "`quote"' or ``quote'' also works.

471
```

#### 3.5 Cleveref examples

Cleveref demonstration: Cref at beginning of sentence, cref in all other cases.

### $\label{eq:Figure} \mbox{\bf Figure for cref demo}$ $\mbox{\bf Fig. 1: Example figure for cref demo}$

Table **1:** Example table for cref demo

Figure 1 shows a simple fact, although Fig. 1 could also show something else. Table 1 shows a simple fact, although Table 1 could also show something else. Section 3.5 shows a simple fact, although Sect. 3.5 could also show something else.

```
Corresponding LATEX code of paper-minted.tex

493 \Cref{fig:ex:cref} shows a simple fact, although

$\to$ \cref{fig:ex:cref} could also show something else.

494

495 \Cref{tab:ex:cref} shows a simple fact, although

$\to$ \cref{tab:ex:cref} could also show something else.

496

497 \Cref{sec:ex:cref} shows a simple fact, although

$\to$ \cref{sec:ex:cref} could also show something else.
```

#### 3.6 Figures

Figure 2 shows something interesting.

## Golden ratio

(Original size: 32.361×200 bp)

Fig. 2: Simple Figure. Based on Scharrer [3].

```
Corresponding LATEX code of paper-minted.tex

502 \Cref{fig:label} shows something interesting.

503

504 \begin{figure}
505 \centering
506 \includegraphics[width=.8\textwidth] {example-image-golden}
507 \caption[Simple Figure] {Simple Figure. Based on
$\to \citet{mwe}.}$

508 \label{fig:label}
509 \end{figure}
```

One can also have pictures floating inside text:

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place.  $\sin^2(\alpha) + \cos^2(\beta) = 1$ . If you read this text, you will get no information  $E = mc^2$ . Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look.



Fig. 3: A floating figure

 $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$ . This text should contain all letters of the alphabet and it should be written in of the original language.  $\frac{\sqrt[n]{a}}{\sqrt[n]{b}} = \sqrt[n]{\frac{a}{b}}$ . There is no need for special content, but the length of words should match the language.  $a\sqrt[n]{b} = \sqrt[n]{a^nb}$ . Hello, here is some text without a meaning.  $d\Omega = \sin\vartheta d\vartheta d\varphi$ . This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look.  $\sin^2(\alpha) + \cos^2(\beta) = 1$ . This text should contain all letters of the alphabet and it should be written in of the original language  $E = mc^2$ . There is no need for special content, but the length of words should match the language.  $\sqrt[n]{a} \cdot \sqrt[n]{b} = \sqrt[n]{ab}$ .

```
Corresponding IATEX code of paper-minted.tex

516 \begin{floatingfigure}{.33\linewidth}
517 \includegraphics[width=.29\linewidth]{example-image-a}
518 \caption{A floating figure}
519 \end{floatingfigure}
520 \blindtext[2]
```

#### 3.7 Tables

Table 2: Simple Table

Heading1	Heading2
One	Two
Thee	Four

#### Corresponding LATEX code of paper-minted.tex 527 \begin{table} \caption{Simple Table} \label{tab:simple} \centering 530 \begin{tabular}{11} 531 \toprule 532 Heading1 & Heading2 \\ 533 \midrule 534 One & Two 535 536 Thee & Four \bottomrule \end{tabular} 539 \end{table}

Table 3: Table with diagonal line

Diag Column Head II Diag Column Head I	Second	Third
	foo	bar

```
Corresponding LATEX code of paper-minted.tex
_{543} % Source: https://tex.stackexchange.com/a/468994/9075
544 \begin{table}
545 \caption{Table with diagonal line}
546 \label{tab:diag}
547 \begin{center}
\begin{tabular}{|l|c|c|}
549 \hline
{\tt 550} $$ \diagbox[width=10em]{Diag\Column Head I}{Diag Column\Head} $$
    _{\hookrightarrow} II} & Second & Third \\
551 \hline
_{552} & foo & bar \\
553 \hline
554 \end{tabular}
555 \end{center}
556 \end{table}
```

#### 3.8 Source Code

minted is a sophisticated packes to enable properly highlighted listings. It uses the pygments library, which in turn requires Python.

Listing 1 shows source code written in XML. line 2 contains a comment.

```
1 1 1 sting name="example">
2  <!-- comment -->
3  <content>not interesting</content>
4 </listing>
```

List. 1: Example XML listing using minted

```
Corresponding \LaTeX code of paper-minted.tex
   \Cref{lst:XML} shows source code written in XML.
   \refline{line:comment} contains a comment.
567
568
   \begin{listing}[htbp]
569
        \begin{minted}[linenos=true,escapeinside=||]{xml}
570
571 571 sting name="example">
     <!-- comment --> |\labelline{line:comment}|
572
      <content>not interesting</content>
574 </listing>
575 \end{minted}
      \caption{Example XML listing using minted}
     \label{lst:XML}
577
578 \end{listing}
```

One can also typeset JSON as shown in Listing 2.

List. 2: Example JSON listing using minted

#### 

Java is also possible as shown in ??.

```
public class Hello {
public static void main (String[] args) {
System.out.println("Hello World!");
}
}
```

 $\textbf{List. 3:} \ \text{Java code rendered using minted}$ 

```
Corresponding LATEX code of paper-minted.tex
    \begin{listing}[htbp]
        \begin{minted}[linenos=true,escapeinside=||]{java}
   public class Hello {
600
       public static void main (String[] args) {
601
            System.out.println("Hello World!");
602
603
   }
604
    \end{minted}
605
      \caption{Java code rendered using minted}
606
      \label{lst:java}
607
   \end{listing}
```

#### 3.9 Itemization

One can list items as follows:

- Item One
- Item Two

# Corresponding LATEX code of paper-minted.tex 616 \begin{itemize} 617 \item Item One 618 \item Item Two 619 \end{itemize}

One can enumerate items as follows:

- 1. Item One
- 2. Item Two

```
Corresponding IATEX code of paper-minted.tex

begin{enumerate}

item Item One

item Item Two

end{enumerate}
```

With paralist, one can even have all items typset after each other and have them clean in the tex document:

1. All these items... 2. ...appear in one line 3. This is enabled by the paralist package.

```
Corresponding LATEX code of paper-minted.tex

begin{inparaenum}
item All these items...
item ...appear in one line
item This is enabled by the paralist package.
bed{inparaenum}
```

#### 3.10 Other Features

The words "workflow" and "dwarflike" can be copied from the PDF and pasted to a text file.

```
Corresponding LATEX code of paper-minted.tex

646 The words \enquote{workflow} and \enquote{dwarflike} can be

copied from the PDF and pasted to a text file.
```

The symbol for powerset is now correct:  $\mathcal P$  and not a Weierstrass p  $(\wp)$ .  $\mathcal P(1,2,3)$ 

```
Corresponding IATEX code of paper-minted.tex

650 The symbol for powerset is now correct: $\powerset$ and not a

$\to$ Weierstrass p ($\wp$).

651
652 $\powerset({1,2,3})$
```

Brackets work as designed: <test> One can also input backquotes in verbatim text: `test`.

```
Corresponding LATEX code of paper-minted.tex

656 Brackets work as designed:
657 <test>
658 One can also input backquotes in verbatim text:
658 \( \text{verb} \) \( \text{ver
```

#### 4 Conclusion and Outlook

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#### Acknowledgments ...

In the bibliography, use \textsuperscript for "st", "nd", ...: E.g., "The  $2^{\rm nd}$  conference on examples". When you use JabRef, you can use the clean up command to achieve that. See https://help.jabref.org/en/CleanupEntries for an overview of the cleanup functionality.

#### References

- 1. Binz, T., Breiter, G., Leymann, F., Spatzier, T.: Portable Cloud Services Using TOSCA. IEEE Internet Computing 16(03), 80–85 (May 2012)
- 2. Kopp, O., et al.: Winery A Modeling Tool for TOSCA-based Cloud Applications. In: Proceedings of 11<sup>th</sup> International Conference on Service-Oriented Computing (ICSOC'13). LNCS, vol. 8274, pp. 700–704. Springer Berlin Heidelberg (2013)
- 3. Scharrer, M.: The mwe Package (2017), http://texdoc.net/mwe

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