Quick start for LaTeXing with IEEEtran.cls for IEEE Conferences

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***Abstract*—Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.**

I. Introduction

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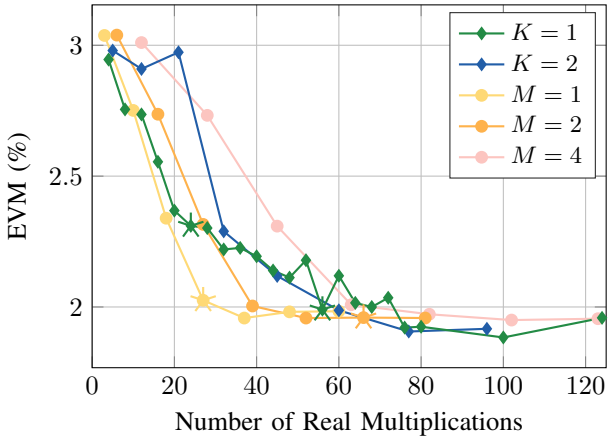

Figure 1. Example spectrum for the $M = 4$ polynomial and $K = 1$ **NN!**. Each of these use around 80 multiplications per time-domain input sample to the DPD.

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The remainder of the paper starts with a presentation of related work (Section II). It is followed by a presentation of hints on LaTeX (Section III). Based on that, we present some Lorem Ipsum (Section IV). Finally, a conclusion is drawn and outlook on future work is made (Section V).

$$\hat{x}^{(i)}(n) = \sum_{p=1}^{P} \sum_{m=0}^{M} \beta_{p,m}^{(i)} x^{(i)}(n-m) \left| x^{(i)}(n-m) \right|^{p-1}, \quad (1)$$

There is an equation in (1).

II. Related Work

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

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

Listing 1. Example Java Listing

```xml
<example attr="demo">
  text content
</example>
```

Listing 2. Example XML Listing

III. LaTeX Hints

Listings 1 and 2 show listings typeset using the `lstlisting` environment.

Kernel 1 Example Algorithm

$i \leftarrow$ Block Index
$n \leftarrow$ Thread Index
load $\boldsymbol{\beta}^{(i)}$ from constant memory
$m = 0; p = 1;$ // Memory and polynomial indexes
for $m < M$ **do** // Loop over memory depth
    $y \leftarrow x^{(i)}(n - m)$ // Loaded from global memory
    $\mathbf{z}[m] = y$
    $a = |y|^2$
    $b = y \cdot a$
    for $p <= P$ **do**
        $\mathbf{z}[pM + m] = b$
        $b = b \cdot a$
    end for
end for
$\hat{x}^{(i)}(n) = \mathbf{z} \cdot \boldsymbol{\beta}^{(i)}$
return $\hat{x}^{(i)}(n)$

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

Figure 2 shows a simple fact, although Fig. 2 could also show something else. Figure 3 shows an 16x9 image spanning two columns. Figure 4a is the first subfloat, whereas Figure 4b is the second one.

Table I shows a simple fact, although Table I could also show something else.

Section I shows a simple fact, although Section I could also show something else.

Table I
SIMPLE TABLE

Heading1	Heading2
One	Two
Thee	Four

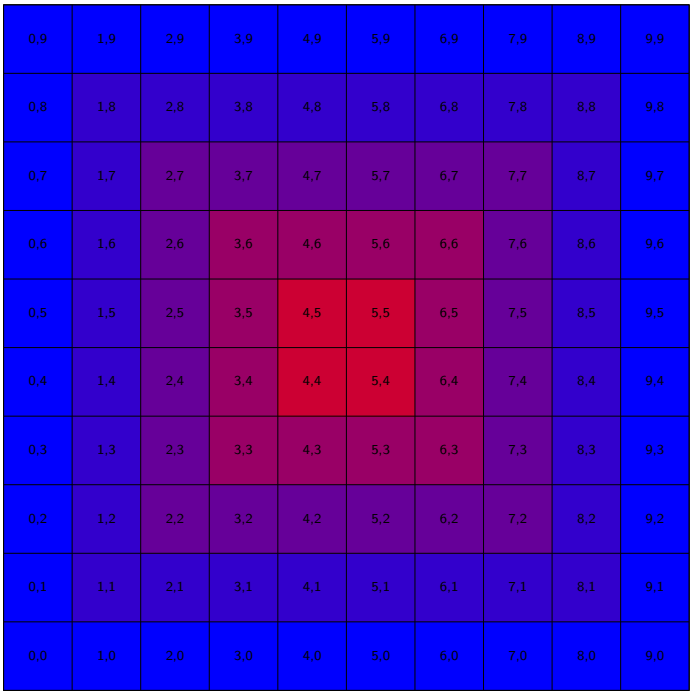

Figure 2. Simple Figure. [based on 2]

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

The symbol for powerset is now correct: $\wp$ and not a Weierstrass p ($\wp$).

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

“something in quotes” using plain tex or use “the enquote command”.

You can now write words containing hyphens which are hyphenated (application-specific) at other places. This is enabled by an additional configuration of the babel package. In case you write “application-specific”, then the word will only be hyphenated at the dash.

IV. Lorem ipsum

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V. Conclusion and Outlook

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Acknowledgment

This work received support from the IEEE LaTeX Template.

In the bibliography, use `\textsuperscript` for “st”, “nd”, ...: E.g., “The 2nd 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] P. Campo, V. Lampu, A. Meirhaeghe, J. Boutellier, L. Anttila, and M. Valkama, “Digital predistortion for 5G small cell: GPU implementation and RF measurements,” *J Sign Process Syst*, vol. 92, pp. 475–486, 2020.

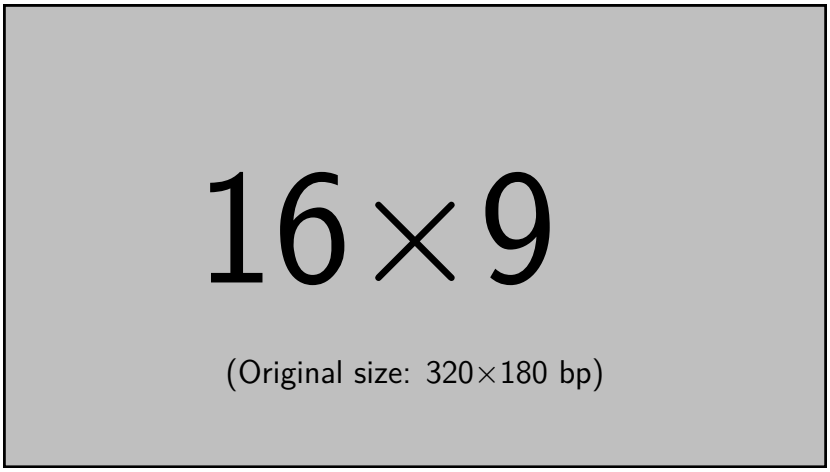


Figure 3. 16x9 Figure

[2] L. Ding, G. T. Zhou, D. R. Morgan, Z. Ma, J. S. Kenney, J. Kim, and C. R. Giardina, "A robust digital baseband predistorter constructed using memory polynomials," *IEEE Trans. Commun*, vol. 52, no. 1, pp. 159–165, Jan 2004.

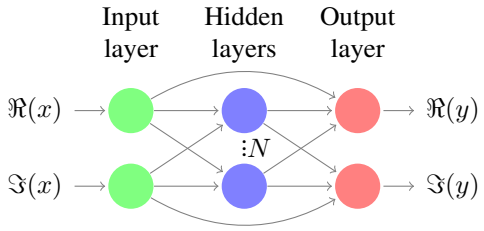
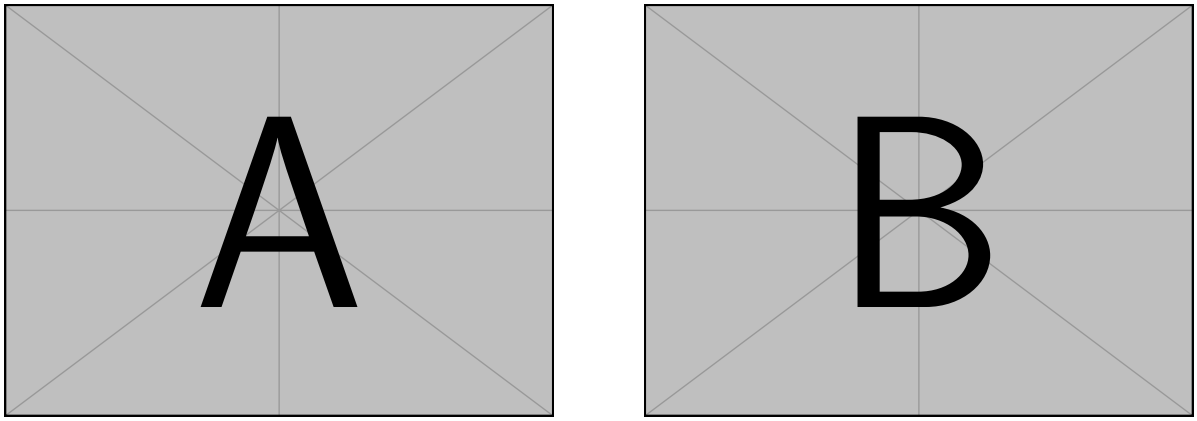


Figure 5. General structure of the DPD and PA neural networks. There are two input and output neurons for the real and imaginary parts of the signal, N neurons per hidden layer, and K hidden layers. The inputs are directly added to the output neurons so that the hidden layers concentrate on the nonlinear portion of the signal.



(a) Case I (b) Case II

Figure 4. Simulation results for the network.