

# AUTHOR GUIDELINES FOR ICIP 2017 PROCEEDINGS MANUSCRIPTS

*Author(s) Name(s)*

Author Affiliation(s)

## ABSTRACT

The abstract should appear at the top of the left-hand column of text, about 0.5 inch (12 mm) below the title area and no more than 3.125 inches (80 mm) in length. Leave a 0.5 inch (12 mm) space between the end of the abstract and the beginning of the main text. The abstract should contain about 100 to 150 words, and should be identical to the abstract text submitted electronically along with the paper cover sheet. All manuscripts must be in English, printed in black ink.

**Index Terms**— One, two, three, four, five

## 1. INTRODUCTION

More and more content is being shared everyday on the internet. Most of this content is trivial and does not need to be encrypted. Some of it however needs to be securely transferred, the problem of encryption arises. Full encryption with methods such as AES for example are often not needed in addition to not being possible due to computing power constraints. Instead, partial or selective encryption is used, where the goal is sufficient encryption. That is, the image is sufficiently distorted and an attacker is not able to access the content. This distortion can be of varying magnitude, a strong distortion for example for DRM, or a lighter distortion, where the content is still recognizable to attract the viewers interest. *TODO : encryption state of the art*. When an image is intended to be consumed by a human, the most accurate measure of its confidentiality is a Mean Opinion Score, where people rate the image. It is however not a realistic way to rate the distortion of an image as it is way to expensive and time consuming, security and quality metrics were introduced as a means to automate the process.

## 2. CREATING THE DATASET

The cryptocompression method we use is targeted towards JPEG images. We have six parameters that we can enable or not to generate a cryptocompressed image. *Shuffle* and *xor* are the parameters that decide the actual encryption method. *AC* and *DC* control which part of the DCT will be encrypted and

two additional parameters, *chrominance* and *luminance* decide which of the luminance, chrominance (or both) DCT coefficients will be encrypted. As there must be at least one encryption method, at least one type of coefficient, and chrominance or luminance selected, we have a total of 27 different distortions. **Explain shuffle and xor and maybe link Vincent's paper**. We use the training images from the BSDS500 [?] dataset as our input images for a total of  $27 * 200 = 5400$  cryptocompressed images.

## 3. PAGE TITLE SECTION

The paper title (on the first page) should begin 1.38 inches (35 mm) from the top edge of the page, centered, completely capitalized, and in Times 14-point, boldface type. The authors' name(s) and affiliation(s) appear below the title in capital and lower case letters. Papers with multiple authors and affiliations may require two or more lines for this information. Please note that papers should not be submitted blind; include the authors' names on the PDF.

## 4. TYPE-STYLE AND FONTS

To achieve the best rendering both in printed proceedings and electronic proceedings, we strongly encourage you to use Times-Roman font. In addition, this will give the proceedings a more uniform look. Use a font that is no smaller than nine point type throughout the paper, including figure captions.

In nine point type font, capital letters are 2 mm high. **If you use the smallest point size, there should be no more than 3.2 lines/cm (8 lines/inch) vertically.** This is a minimum spacing; 2.75 lines/cm (7 lines/inch) will make the paper much more readable. Larger type sizes require correspondingly larger vertical spacing. Please do not double-space your paper. TrueType or Postscript Type 1 fonts are preferred.

The first paragraph in each section should not be indented, but all the following paragraphs within the section should be indented as these paragraphs demonstrate.

## 5. MAJOR HEADINGS

Major headings, for example, "1. Introduction", should appear in all capital letters, bold face if possible, centered in the

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Thanks to XYZ agency for funding.

column, with one blank line before, and one blank line after. Use a period (".") after the heading number, not a colon.

### 5.1. Subheadings

Subheadings should appear in lower case (initial word capitalized) in boldface. They should start at the left margin on a separate line.

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Sub-subheadings, as in this paragraph, are discouraged. However, if you must use them, they should appear in lower case (initial word capitalized) and start at the left margin on a separate line, with paragraph text beginning on the following line. They should be in italics.

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Print your properly formatted text on high-quality, 8.5 x 11-inch white printer paper. A4 paper is also acceptable, but please leave the extra 0.5 inch (12 mm) empty at the BOTTOM of the page and follow the top and left margins as specified. If the last page of your paper is only partially filled, arrange the columns so that they are evenly balanced if possible, rather than having one long column.

In LaTeX, to start a new column (but not a new page) and help balance the last-page column lengths, you can use the command “\pagebreak” as demonstrated on this page (see the LaTeX source below).

## 7. PAGE NUMBERING

Please do **not** paginate your paper. Page numbers, session numbers, and conference identification will be inserted when the paper is included in the proceedings.

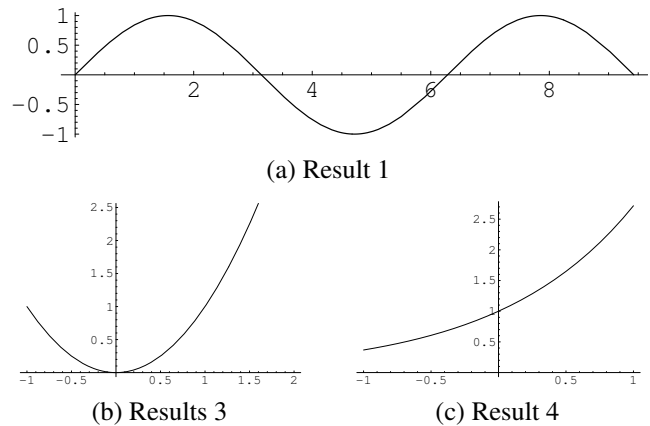
## 8. ILLUSTRATIONS, GRAPHS, AND PHOTOGRAPHS

Illustrations must appear within the designated margins. They may span the two columns. If possible, position illustrations at the top of columns, rather than in the middle or at the bottom. Caption and number every illustration. All halftone illustrations must be clear black and white prints. Colors may be used, but they should be selected so as to be readable when printed on a black-only printer.

Since there are many ways, often incompatible, of including images (e.g., with experimental results) in a LaTeX document, below is an example of how to do this [1].

## 9. FOOTNOTES

Use footnotes sparingly (or not at all!) and place them at the bottom of the column on the page on which they are referenced. Use Times 9-point type, single-spaced. To help your readers, avoid using footnotes altogether and include necessary peripheral observations in the text (within parentheses, if you prefer, as in this sentence).



**Fig. 1.** Example of placing a figure with experimental results.

## 10. COPYRIGHT FORMS

You must include your fully completed, signed IEEE copyright release form when you submit your paper. We **must** have this form before your paper can be published in the proceedings.

## 11. REFERENCES

List and number all bibliographical references at the end of the paper. The references can be numbered in alphabetic order or in order of appearance in the document. When referring to them in the text, type the corresponding reference number in square brackets as shown at the end of this sentence [2]. An additional final page (the fifth page, in most cases) is allowed, but must contain only references to the prior literature.

## 12. REFERENCES

- [1] A.B. Smith, C.D. Jones, and E.F. Roberts, “Article title,” *Journal*, vol. 62, pp. 291–294, January 1920.
- [2] C.D. Jones, A.B. Smith, and E.F. Roberts, “Article title,” in *Proceedings Title*. IEEE, 2003, vol. II, pp. 803–806.