***Computer Vision Implementation for Detecting Coffea canephora Leave Diseases Using Residual Neural Network***

**Implementasi Computer Vision Untuk Mendeteksi Penyakit pada Daun Coffea canephora Menggunakan Residual Neural Network**

**Stanislaus Jiwandana Pinasthika1\*, Annisa Fitri Maghfiroh Harvyanti2**

1,2Program Studi Informatika, Fakultas Ilmu Komputer, Universitas Jember, Indonesia

E-Mail: 1stanislausjp@unej.ac.id, 2annisafmh@unej.ac.id

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*Corresponding Author: Corresponding Author*

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**Abstract**

*Abstract consists of problems, problem solving and the results of problem solving done. Written in Indonesia and English with a font size of 9 pt, a maximum of 200 words including conjunctions and abbreviations. Keywords are written in Indonesia and English with a font size of 9 pt, sorted alphabetically by ascending A-Z with a minimum of 5 (five) keywords.*

*Keyword: are written in five words which should be a subset of the paper title, written in lowercase except for abbreviations, and separated by commas (exp. KNN, air conditioner, etc)*

**Abstrak**

Abstrak terdiri dari masalah, pemecahan masalah dan hasil pemecahan masalah yang dilakukan. Ditulis dalam bahasa Indonesia dan bahasa Inggris dengan ukuran font 9 pt, maksimal 200 kata termasuk konjungsi dan singkatan. Kata kunci ditulis dalam bahasa Indonesia dan bahasa Inggris dengan ukuran font 9 pt, diurutkan menurut abjad ascending A-Z dengan minimal 5 (lima) kata kunci.

Kata Kunci: ditulis dalam lima kata yang merupakan bagian dari judul makalah, ditulis dengan huruf kecil kecuali singkatan, dan dipisahkan dengan koma (mis. KNN, penyejuk udara, etc).

(*Enter 3x with 1 space*)

# INTRODUCTION ( HEADING 1, 10pt)

The following is a guide to writing research paper in the Indonesian Journal of Machine Learning and Computer Science (MALCOM) published by the professional organization, Institute Research and Publication Indonesia (IRPI) . The manuscript is an unpublished text and the authors are fully responsible for the contents of the manuscript. [1, 2]. References (citation) which are used must follow the IEEE style. The introduction is written using a font size of 10 pt with paragraphs after 0 and before 0.

The article should consist of: 1. Introduction, 2. Research Methodology/Materials and Methods (including analysis, architecture, methods used to solve problems, implementation), 3. Results and Discussion, 4. Conclusion, 5. Acknowledgments (if any) and List of Reference [3].

The content of the introduction is the answer to the question: (1). Background, (2). Brief Literature Review, (3). The reason of this study and (4). Question of purpose.

# MATERIALS AND METHOD (HEADING 1, 10)

Materials and methode describe the preparation method and characterization technique used. Describe briefly, but still accurately, such as size, volume, replication, and working techniques. The new method must be explained in detail so that other researchers can reproduce the experiment. Meanwhile, the predetermined method can be explained by citing references.



**Figure 1.** Research Methodology

## The Length of the Paper (heading 2, 10pt)

The manuscript is written in A4 paper size with a minimum page size of 6 pages, maximum of 11 pages, including tables and drawings, and with reference to the writing procedure as set forth in this paper.

The formula is written clearly using an equation with an index like the following example:

(1)

If your paper includes a program listing, use the following format:

Sample of algorithm

**Input:** *mMG, Ed*

**Output:** *mMG*

**Initialization** *i, j*

**Get** *line*, *column*, *max*

*[line,column] = size(mMG)*

*max=0*

for *i* = 1 to *line* do

for *j* = 1 to *column* do

if *max < mMG*(*i*, *j*)

*max = mMG*(*i*, *j)*

end if

end for

end for

## Paper Organization (heading 2, 10pt)

The title should be clear and concise. Author's name and their affiliation as written above. The author's name is clearly written without a title.

## Tables (heading 2, 10pt)

Tables should be numbered in the order of presentation (Table 1, etc.). Table titles are written on the table with the center justified. The font used is 10pt in both the title of the table and the contents of the table. Tables should be referenced in the text

**Table 2.** Results of Cross Validation Accuracy Measurement

| K | Cross 1 | Cross 2 | Cross 3 | Average |
| --- | --- | --- | --- | --- |
| 1 | 85,57 | 80,76 | 82,69 | 83,00 |
| 2 | 82,21 | 80,28 | 80,28 | 80,92 |
| 3 | 83,65 | 81,25 | 81,25 | 82,53 |
| 4 | 81,25 | 79,80 | 79,80 | 80,28 |
| 5 | 83,17 | 80,76 | 82,21 | 82,04 |
| 6 | 82,21 | 80,28 | 79,80 | 80,76 |
| 7 | 81,73 | 81,25 | 80,76 | 81,24 |
| 8 | 81,73 | 79,32 | 80,28 | 80,44 |
| 9 | 81,73 | 80,76 | 81,73 | 81,40 |
| 10 | 81,73 | 80,28 | 80,28 | 80,76 |
| Cross Avg | 82,49 | 80,47 | 80,90 | 81,28 |

## Figures (heading 2, 10pt)

Figures are numbered in the order of presentation (Figure 1, etc.). The title of the figures are placed under the figures with the center justified. The font used in the title of the image is 10pt. Figures should be referenced in the text.

**Figure 2.** Simulation of the Accuracy of K Value in the MKNN Algorithm

## References (heading 2, 10pt)

Reference should be written in the IEEE Referencing Standard system. Everything listed in the reference should be referenced in the text.

# RESULTS AND DISCUSSION (HEADING 1, 10pt)

The results are written based on a logical order to form a story. It shows facts / data instead of discussing the results. Tables and Figures can be used but not repeating the same data in the same image, table and text. To further clarify the description, subtitles can be used.

Discussion is the basic explanation, relationship and generalization shown by the results. The description answers the research questions. If there are dubious results, then show them objectively.

## Spesification (heading 2, 10pt)

The Times New Roman typeface should be used throughout the manuscript, with the font size as exemplified in this writing guide. Spaces are singular and the contents of a text or script using left-right alignment (justified).

## Page Size (heading 2, 10pt)

Article is written as manuscript in MS Word with A4 page size (210 x 297 mm) with left margin of 3.0 cm, top margin of 2.25 cm, right margin of 2.5 cm, and bottom margin of 2.25.

## Text Layout (heading 2, 10pt)

An easy way to create layouts is to use this guide directly. Download from link provided.

## Heading (heading 2, 10pt)

Use style heading in this template directly. Style has been formatted in such a way as to provide suitable heading distance

# CONCLUSION (HEADING 1, 10pt)

In conclusion there should be no reference. The conclusion contains the facts obtained. State the application possibilities, implications and speculations as appropriate. If necessary, give suggestions for further research.

# ACKNOWLEDGMENTS (if any) (HEADING 1, 10 pt)

Mention the names of donors and helpers. The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the stilted expression “one of us (R. B. G.) thanks ...”. Instead, try “R. B. G. thanks...”. Put sponsor acknowledgments in the unnumbered footnote on the first page

# REFERENCES (HEADING 1, 10 pt)

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