**Paper Instructions for CIE4512 Final Project 2022**

**Anonymous Submission**

Paper ID: XXX

**Abstract**

1 The abstract should ﬁrst state the problem you want to solve and drawbacks of

2 existing approaches in a very brief way. Then it should state key steps of your

3 proposed algorithm with *clear* motivations and/or observations. This part is the

4 majority of your abstract. Finally, some highlight experiment results should be

5 shown here. Try to avoid using citation and equation here.

6 Disclaimer: The writing guideline below is just for ***beginners***. You are absolutely at freewill to write

7 in your own style. An example paper on pose estimation is here:

8 [https://arxiv.org/pdf/1611.00468.pdf.](https://arxiv.org/pdf/1611.00468.pdf)

9 **1 Introduction**

10 Probably this is the most important section in the whole paper. First you should state the problem

11 background, overview, etc.

12 Then some transitional sentence is followed by starting a new paragraph, pointing out the potential

13 drawbacks or concerns in the problem you are trying to solve. The motivation naturally comes out. It

14 would be better to provide some ﬁgures to illustrate your idea (like a toy example).

15 The third part ﬁrst comes the famous ‘In this paper, we propose XXX, which is shown in Figure 1.’

16 sentence; some brief statements should be appended explaining the key steps of your algorithm. A

17 very brief version of the algorithm’s key components should appear in the abstract.

18 The last paragraph should list the contributions of your paper and optionally provide some external

19 links (Github/project page, code link, etc.), as we have an active lean towards open-source research.

20 **1.1 Related Work**

21 Due to a maximum page of four in our project, we suggest you to write a sub-section of related work

22 here. No need to start a new section. This part should state some important and relevant work with

23 your method: how previous work address the problem, their existing problems or drawbacks, what

24 differentiate yours from theirs. For citation, you can use Li *et al.* [[1] propose a blabla](#bookmark1). Or use batch

25 [citations like, previous work [2,](#bookmark2)[4,](#bookmark3)[3] address the problem blabla](#bookmark4).

26 **2 The Proposed Algorithm**

27 Write a clear pipeline; use subsection to state your method explicitly; apply professional mathematical

28 denotations and expressions. Use ﬁgures and/or tables to illustrate the claimed idea.

29 In one word: write a professional research article.

Under review in the ﬁnal project for CIE4512- Digital Image Processing. Do not distribute.

Table 1: Sample table title

|  |  |  |
| --- | --- | --- |
| Part | | Size (μm) |
| Name | Description |
| Dendrite | Input terminal | ~100 |
| Axon | Output terminal | ~10 |
| Soma | Cell body | up to 106 |

30 **3 Experiments**

31 The experiment should ﬁrst state the dataset overview, evaluation metric and implementation details;

32 then a sub-section on individual component analysis should be followed (why component A is

33 necessary in my algorithm; what if A is removed, or A is replaced with B); the last part should list

34 the performance comparison between the proposed method and previous state-of-the-arts.

35 Since we have a tight paper length requirement, you can put some parts of the experiments in the

36 Appendix section if your paper is over-length.

37 **4 Discussions (optional)**

38 ***Note: no need to write the conclusion part.***

39 **5 Misc for preparing your paper**

40 There are some useful commands for ﬁrst-time LATEXwriters.

41 **5.1 Figures**

See Figure [1.](#bookmark6)

|  |
| --- |
|  |

Figure 1: Sample ﬁgure caption. 42

43 **5.2 Tables**

44 All tables must be centered, neat, clean and legible. The table number and title always appear before

45 the table. See Table [1.](#bookmark5)

46 **5.3 Items and Algorithm**

47 ● Item 1.

48 ● I love deep learning so much and the course TAs are so lovely.

49 **5.4 Citations**

50 Add the citations in the dl .bib ﬁle. Try to use unanimous citation format across your paper.

51 **Acknowledgments**

52 This part is optional. All acknowledgments go at the end of the paper. Do *not* include acknowledg-

53 ments in the anonymized submission, only in the ﬁnal paper.

54 **References**

55 [1] P. Arbeláez,J. Pont-Tuset,J. Barron,F. Marques, and J. Malik. Multiscale combinatorial grouping.

56 In *CVPR*, 2014.

57 [2] M. Cheng, Z. Zhang, W. Lin, and P. H. S. Torr. BING: binarized normed gradients for objectness

58 estimation at 300fps. In *CVPR*, 2014.

59 [3] J. Hosang, R. Benenson, P. Dollár, and B. Schiele. What makes for effective detection proposals?

60 *IEEE Trans. on PAMI*, 2015.

61 [4] Z. Jie, X. Liang, J. Feng, W. F. Lu, E. H. F. Tay, and S. Yan. Scale-aware pixelwise object

62 proposal networks. *IEEE Trans. on Image Processing*, 25, 2016.

63 Page 4.

64 Page 5.

65 Page 6.

66 STOP. The length of the paper is six.

67 A 7-th page can include references *only*. However, we ***strongly*** suggest you to write all contents

68 including references within six pages.

69 If you have more to write, put it in the appendix. We do admit the six-page requirement is a little bit

70 light for a high-quality paper. In top-tier AI/CV/ML conferences, the common paper length is 8.

71 **Appendix**

72 Put whatever you like here. In some sense, this section is also called supplementary material.