Unveiling the PageRank Algorithm: Principles, Performance, and Enhancements

Wu Zelin, Wu Zekai, Li Pengda *

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***Abstract*—This is the abstract area. We should write a very nb abstract here.**

***Keywords*—Keyword1, Keyword2, Keyword3**

I INTRODUCTION

This is the Introduction area. We should write a very nb introduction here.

II RELATED WORK

We should introduce some nb works here. And we should cite some papers here.

A. Subsection 1

In this section we should introduce some nb works here.

B. Subsection 2

This is a simple subsection too.

III MAIN METHOD AND THEORY

We should introduce our methods and Theories here.

A. Subsection 1

This is a simple subsection. We can make a citation here. [1]

Fig. 1 is a figure. You can see it at the top of the page.

*We should thank Miss.Ye here

Fig. 1. This is a figure.

B. The 3rd Section 2nd Subsection

This is a simple subsection too.

IV EXPERIMENT

This is a simple section.

A. The 4th Section 1st Subsection

This is a simple subsection.

This is an equation:

$$e^{\pi i} + 1 = 0 \tag{1}$$

You can ref it by see(1).

B. The 4th Section 2nd Subsection

This is a simple subsection too.

This is a algorithm:

Algorithm 1 Weighted Tanimoto ELM.

TRAIN($\mathbf{XT}$)
  select randomly $W \subset \mathbf{X}$
  $N_{\mathbf{t}} \leftarrow |\{i : \mathbf{t}_i = \mathbf{t}\}|$ **for** $\mathbf{t} = -1, +1$
  $B_i \leftarrow \sqrt{\textsc{max}(N_{-1}, N_{+1})/N_{\mathbf{t}_i}}$ **for** $i = 1, ..., N$
  $\hat{\mathbf{H}} \leftarrow B \cdot (\mathbf{X}^T\mathbf{W})/(⊮\mathbf{X} + ⊮\mathbf{W} - \mathbf{X}^T\mathbf{W})$
  $\beta \leftarrow \left(I/C + \hat{\mathbf{H}}^T\hat{\mathbf{H}}\right)^{-1} (\hat{\mathbf{H}}^T B \cdot \mathbf{T})$
  return $\mathbf{W}, \beta$

PREDICT($\mathbf{X}$)
  $\mathbf{H} \leftarrow (\mathbf{X}^T\mathbf{W})/(⊮\mathbf{X} + ⊮\mathbf{W} - \mathbf{X}^T\mathbf{W})$
  return $\textsc{sign}(\mathbf{H}\beta)$

V RESULTS

This is the results area. We should write some very nb results here.

VI CONCLUSION

This is the conclusion area. We should write a very nb conclusion here.

References

[1] S. Zhan, S. Li and W. Wang, *A Very Nb Book*. Shanghai, P.R.C., East China Normal Univ. Press, 2022.