

Implementing an SVM

A shot in the dark

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Abstract—The abstract goes here.

Index Terms—IEEE, IEEEtran, journal, L^AT_EX, paper, template.

I. INTRODUCTION

THIS demo file is intended to serve as a “starter file” for IEEE journal papers produced under L^AT_EX using IEEEtran.cls version 1.8b and later. I wish you the best of success.

mds

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A. Subsection #1

Subsection text here. Sample text and stuff goes here.

II. IMPLEMENTATION

III. EXPERIMENTS

After the SVMs were all trained using the bootstrapping method, we used a committee-waterfall approach to determine the best class for each test point. In order to do this, the SVMs are grouped by classifier, with 7 independently trained SVMs per each of the 8 classifiers. Each test point is run through each of the 7*8=56 SVMs. When committee results are gathered, if the point has less than 4 committee votes for each classifier, it is unclassified. If the point has 4 or more votes from just one classifier group, it is classified to that group. If the point has 4 or more votes from multiple classification committees, it is classified to the committee with the most votes, or in the event of a tie, to a random choice between the tie.

IV. CONCLUSION

V. REFERENCES

Appendix one text goes here.

ACKNOWLEDGMENT

Christina would like to thank her mom for her support.

REFERENCES

- [1] Tulloch, Andrew. *A Basic Soft-Margin Kernel SVM Implementation In Python*. Tullo.ch. N.p., 2013. Web. 24 Mar. 2016.
- [2] *Quadratic Programming With Python And CVXOPT*. N.p., 2016. Web. 24 Mar. 2016.
- [3] *How To Calculate A Gaussian Kernel Effectively In Numpy*. Stats.stackexchange.com. N.p., 2016. Web. 24 Mar. 2016.
- [4] *Scipy.Spatial.Distance.Pdist Scipy V0.17.0 Reference Guide*. Docs.scipy.org. N.p., 2016. Web. 24 Mar. 2016.



Michael Shell Biography text here.

John Doe Biography text here.

Jane Doe Biography text here.