SMS Spam Filtering using WEKA

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Abstract

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1 Introduction

2 Background

2.1 Background

In this work, we investigate human computer interaction.

2.1.1 Robot Interfaces

In seminar today, we looked for papers on the ACM Digital Library. The following paper is about virtual reality [2].

Just found another paper on robotics TODO: READ Soon! [1]

2.2 Previous Work

In seminar today, we looked for papers on the ACM Digital Library. The following paper is about virtual reality [2].

Found another paper... think the tile has VRGP in it... make sure to read.

3 Implementation

3.1 First section

You may need a nice figure, which you can algorithmically render using the Tikz package. You should really check out the Texample web site where several nice tikz examples are provided (http://www.texample.net/tikz/examples/all/).

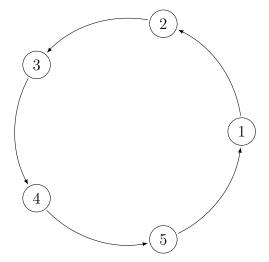


Figure 3.1: Clear and concise figure captions are important to write. This one illustrates the cycle of a graph.

3.2 Initial Section

- What language am I doing this in?
- What is the question the urban p[lanner want solved?
- 1. What language am I doing this in?
- 2. What is the question the urban p[lanner want solved?
- 3. new item
 - new 1
 - \bullet new 2

A graph rendered with the Tikz package is shown in Figure 3.1.

3.2.1 Subsection One

3.2.2 Subsection Two

3.2.3 Subsection Three

3.3 New Section For Next Important Topic

3.3.1 Algorithm Initialization

3.3.2 Atomic Operations

You may even need code in your thesis. Here is a way to nicely include code with LATEX using the listings package.

```
for (unsigned int idx=0; idx<maxSize; idx++) {
   atomic_add( idx );
}</pre>
```

3.3.3 Programming Style

Explaining Fine Detail Here

TODO: Make sure to finish this!

Last Subsection

4 Results

Algorithm	SC%	ВН%	Acc%	MCC
Naive Bayes NB	85.5%	1.2%	96.9%	0.869
Naive Bayes Multinomial NB MN	92.6%	1.0%	97.7%	0.902
Boosted Naive Bayes BNB	85.5%	1.2%	96.9%	0.869
SVM	81.6%	1.3%	96.3%	0.841
SVM Stochastic Gradient Descent	86%	0.6%	97.6%	0.896
Voted Perceptron	81.4%	1.6%	96%	0.829
PART	71.1%	3.1%	93.1%	0.710
J48	58.7%	1.3%	92.9%	0.684
1NN	63.5%	23%	84.4%	0.309
3NN	43.9%	25.2%	80%	0.144

Table 1 - The results when the the data is split 30% and 70% as Training and Test.

Algorithm	SC%	ВН%	Acc%	MCC
Naive Bayes NB	86.6%	1.5%	96.9%	0.865
Naive Bayes Multinomial NB MN	92.6%	1.0%	98.1%	0.918
Bossted Naive Bayes BNB	86.6%	1.5%	96.9%	0.865
SVM	75.5%	0%	96.8%	0.918
SVM Stochastic Gradient Descent	89.4%	0.1%	97.8%	0.903
Voted Perceptron	87.7%	1%	97.5%	0.890
PART	85%	1.5%	96.7%	0.856
J48	80.9%	0.9%	96.6%	0.849
1NN	66.3%	0.3%	95.3%	0.781
3NN	49.3%	0%	93.7%	0.676

Table 1 - The results when the data is 10-fold cross-validated.

The quick brown fox jumps right over the lazy dog and the starting of the treat the dunsfj fksths dijfji sdifjs dfjsid d sddfsdf dsgjngs kfsnfsdf dsf sdfsdfsd fsdf sdofkf sthe

5 Conclusions

How can you wrap this up?

A Appendix A

Do you need an Appendix? You can include several of them if you want.

References

- [1] D. Drascic, P. Milgram, and J. Grodski. "Learning effects in telemanipulation
 - with monoscopic versus stereoscopic remote viewing". In: Systems, Man and
 - Cybernetics, 1989. Conference Proceedings., IEEE International Conference on.
 - Nov. 1989, 1244–1249 vol.3. DOI: 10.1109/ICSMC.1989.71502 (cit. on p. 3).
- [2] O. Kreylos, G. Bawden, T. Bernardin, M. I. Billen, E. S. Cowgill, R. D. Gold,
 - B. Hamann, M. Jadamec, L. H. Kellogg, O. G. Staadt, and D. Y. Sumner. "En-

abling Scientific Workflows in Virtual Reality". In: Proceedings of the 2006 ACM International Conference on Virtual Reality Continuum and Its Applications.

VRCIA '06. Hong Kong, China: ACM, 2006, pp. 155–162. ISBN: 1-59593-324-7. DOI: 10.1145/1128923.1128948. URL: http://doi.acm.org/10.1145/1128923.1128948 (cit. on p. 3).

[3] K. N. Takashi Asawa Akira Hoyanob. "Thermal design tool for outdoor spaces based on heat balance simulation using a 3D-CAD system". In: *Building and Environment* 43.1 (Dec. 2007), pp. 2112–2123 (cit. on p. 2).