

CAAM 600, Spring 2014: Citations and Annotated Bibliography

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ABSTRACT

This example is based on Stephen C. Billups' document "Example Annotated Bibliography", but uses an "apalike" [author, year] citation style, as well as a different document class.

INTRODUCTION

For the original, see

http://math.ucdenver.edu/~billups/courses/ma5779/annotated_bibliography.html

SOME CITATIONS

I'm sure that Mifflin (1977) wrote a paper every bit as significant as the notes below suggest. On the other hand, many other people have written tech reports (Billups and Watson, 2000), proceedings articles (Liebling and de Werra, 1997), and even (you will be encouraged to learn!) PhD theses (de Araujo, 1992).

Note the difference between the first citation and the others: the citation refers directly to the author and is typeset as "author (year)", whereas the others do not, and are typeset as "(author, year)". See the source file for the citation syntax: it is proper to the `seg.bst` bib style and "geo" document classes. Other "apalike" bib style / document class combinations use other methods to distinguish the two different types of citation.

OTHER POSSIBILITIES

You can swap `seg-annotate` for `plain-annotate` in the `bibliography style` line of the source file to see the same text and citations with plain bib style. You must also switch to the plain `article` document class (top of source file). Yuck. Note that the citation style that works with the geo classes does not quite work with the plain `article` class - a bit of editing will be required to make it behave.

You can also change the document class, keeping “apalike” citations, by uncommenting various lines at the top of the source file - for example, the `[manuscript]{geophysics}` class produces double-spaced text suitable for review.

Finally, if you swap `seg-annotate` for `seg` in the `bibliographystyle` instruction, the notes will disappear!

CONCLUSION

This is it.

ACKNOWLEDGEMENT

I am greatly indebted to Sephen C. Billups for adding a simple annotation mechanism to bibtex. While I have greatly modified the example tex file from his web page “Creating an annotated bibliography”, the files `plain-annotate.bst` and `bib_example.bib` are copies. The files were downloaded on 17 February 2014. I hacked the `seg.bst` file from the Madagascar web site http://www.ahay.org/wiki/Main_Page, borrowing code from Billups’ `plain-annotate.bst` to create `seg-annotate.bst`.

Many thanks also to Timur Takhtaganov for making me aware of Billup’s contribution. In fact, Timur’s homework assignment inspired this document!

REFERENCES

Anderson, E. J., 1985, A new primal algorithm for semi-infinite linear programming: Presented at the Proceedings of an International Symposium on Infinite Dimensional Linear Programming, Cambridge, September 1984, Springer-Verlag.

Billups, S. C. and L. T. Watson, 2000, A probability-one homotopy algorithm for nonsmooth equations and mixed complementarity problems: UCD/CCM Report No. 165, University of Colorado at Denver, Denver, Colorado.

This paper extends the probability-one homotopy algorithm of Chow-Yorke and Li, which solves C^2 systems of equations. The resulting algorithm is capable of solving semismooth systems of equations. The basis of the algorithm is to “smooth” the nonsmooth system of equations using a smoothing parameter that is a function of the homotopy parameter.

de Araujo, J. V. G., 1992, A statistically based procedure for calibration of water distribution systems: PhD thesis, Oklahoma State University, Stillwater, Oklahoma.

This Ph.D. thesis discusses a statistically based calibration method for water distribution systems. The author gives an in-depth analysis of the calibration procedure discussing analytical methods, optimization methods, and uncertainty analysis for estimating demands and C-factors. A

linear regression technique for estimating the C-factors is discussed. Also, a procedure for transferring uncertainties in input data to the parameter estimation is explained.

Liebling, T. M. and D. de Werra, eds. 1997, Recent progress in unconstrained nonlinear optimization without derivatives, North-Holland. Mathematical Programming Society.

Mifflin, R., 1977, Semismooth and semiconvex functions in constrained optimization: SIAM Journal on Control, **15**, 957–972.

This is the first appearance in the literature of the concept of a semismooth function. Semismooth functions are closed under addition and composition, and also guarantee the local convergence of nonsmooth generalizations of Newton’s method.

Savic, D. A. and G. A. Walters, 1995, Genetic algorithm techniques for calibrating network models: Technical Report 95/12, University of Exeter.

Savic seems to have spent much time and effort in using genetic algorithms in water system design. In this paper he discusses genetic algorithms and gives a brief overview, he discusses how he used a genetic algorithm to calibrate a small water system. He talks about what he was trying to find (c-factors and demands) and how he used a genetic algorithm to do this.

Winter, G., J. Periaux, M. Galan, and P. Cuesta, 1995, Genetic algorithms in engineering and computer science: John Wiley and Sons.

This book contains a general overview of genetic algorithms as well as a few other topics such as neural networks. The book also talks about many applications of genetic algorithms and how researchers slightly changed from standard genetic algorithms by using different crossover techniques different mutations etc. It also discusses using Fuzzy logic in a genetic algorithm and gives techniques to finding the best sample size and mutation probability.