Annotated Bibliography

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References

[1] E. J. Anderson. A new primal algorithm for semi-infinite linear programming. In E. J. Anderson and A. B. Philpott, editors, *Proceedings of an International Symposium on Infinite Dimensional Linear Programming, Cambridge, September 1984*, Berlin, 1985. Springer-Verlag.

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

> 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.

[3] Center for Computational Research. MPI and parallel computing, 2004–2014. http://www.buffalo.edu/ccr/support/UserGuide/AdvancedTopics/mpi.html.

> Explanatory paragraph goes here.

[4] Jose Vicente Granato de Araujo. *A Statistically Based Procedure for Calibration of Water Distribution Systems.* PhD thesis, Oklahoma State University, Stillwater, Oklahoma, May 1992.

> 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.

[5] Thomas M. Liebling and Dominique de Werra, editors. *Recent progress in unconstrained nonlinear optimization without derivatives*, North-Holland, 1997. Mathematical Programming Society.

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

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.

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

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.

[8] Various contributers: The Open MPI Project. Open MPI: Open Source High Performance Computing, 2014. http://www.open-mpi.org/faq/.

Explanatory paragraph goes here.