Algorithmic trading bibliography – Victor Lebreton, 2008

Azoff, E. *Neural Network Time Series Forecasting of Financial Markets*, Wiley & Sons, New York, NY: 1994.

Austin, M. P. ; Bates, R. G. ; Dempster, M. A. H. ; Leemans, V. ; Williams, S. N. Adaptive systems for foreign exchange trading. *Quantitative Finance*, 4(4), 2004, 37–45.

Bates, R. G. ; Dempster, M. A. H. ; Romahi, Y. S. Evolutionary reinforcement learning in FX order book and order flow analysis. *Proceedings of the 2003 IEEE International Conference on Computational Intelligence for Financial Engineering*, Hong Kong, March 2003, 355–362.

Bollerslev, Tim ; Domowitz, Ian ; Wang, Jianxin. Order flow and the bid-ask spread: An empirical probability model of screen -based trading. *Journal of Economic Dynamics and Control*, Volume 21, Issues 8-9, 29 June 1997, Pages 1471-1491.

Bouchard, J. ; Mezard, M. ; Potters,M. Statistical Properties of Stock OrderBooks: empirical Results andModels. *Quantitative Finance*, vol. 2, no. 4, Aug. 2002.

Brailsford, Timothy J. ; Frino, Alex ; Hodgson, Allan ; West, Andrew. Stock market automation and the transmission of information between spot and futures markets. *Journal of Multinational Financial Management*, Volume 9, Issues 3-4, November 1999, Pages 247-264.

Brock,W. ; Lakonishok, J. ; LeBaron, B. Simple technical trading rules and the stochastic properties of stock returns. *J. Finance*, vol. 47, no. 5, 1992, pp. 1731-1763.

Chiu, Kai-Chun ; Xu, Lei. Arbitrage pricing theory-based Gaussian temporal factor analysis for adaptive portfolio management. *Decision Support Systems*, Volume 37, Issue 4, September 2004, Pages 485-500.

Coppejans, Marc ; Domowitz, Ian. Pricing behavior in an off-hours computerized market. *Journal of Empirical Finance*, Volume 6, Issue 5, December 1999, Pages 583-607.

Dempster, M.A.H. ; Leemans, V. An automated FX trading system using adaptive reinforcement learning. *Expert Systems with Applications*, Volume 30, Issue 3, April 2006, Pages 543-552.

Dempster, M. A. H. ; Romahi, Y. S. Intraday FX trading: An evolutionary reinforcement learning approach. *Intelligent Data Engineering and Automated Learning*, 2002, Lecture Notes in Computer Science. Berlin: Springer pp. 347–358.

Dempster, M. A. H. ; Payne, T. W. ; Romahi, Y. S. ; Thompson, G. W. P. Computational learning techniques for intraday FX trading using popular technical indicators. *Special issue on Computational Finance, IEEE Transactions on Neural Networks*, 12, 2001, 744–754.

Dempster, M. A. H., & Jones, C. M. A real-time adaptive trading system using genetic programming. *Quantitative Finance*, 1, 2001, 397–413.

Domowitz, I. ; Yegerman, H. Measuring and Interpreting the Performance of Broker Algorithms. ITG Inc. research report, August 2005.

Domowitz, I., Yegerman, H. The Cost of Algorithmic Trading: A First Look at Comparative Performance. *Brian Bruce, ed., Algorithmic Trading: Precision, Control, Execution*, New York: Institutional Investor, 2005.

Domowitz, Ian ; Hansch, Oliver ; Wang, Xiaoxin. Liquidity commonality and return co-movement. *Journal of Financial Markets*, Volume 8, Issue 4, November 2005, Pages 351-376.

Domowitz, Ian ; Glen, Jack; Madhavan, Ananth. Liquidity, Volatility, and Equity Trading Costs Across Countries and Over Time. *International Finance,* 4, 221- 256, 2001.

Domowitz, Ian ; El-Gamal, Mahmoud A. A consistent nonparametric test of ergodicity for time series with applications. *Journal of Econometrics*, Volume 102, Issue 2, June 2001, Pages 365-398.

Domowitz, Ian. Electronic derivatives exchanges: Implicit mergers, network externalities, and standardization. *The Quarterly Review of Economics and Finance*, Volume 35, Issue 2, Summer 1995, Pages 163-175.

Domowitz, Ian ; Wang, Jianxin. Auctions as algorithms : Computerized trade execution and price discovery. *Journal of Economic Dynamics and Control*, Volume 18, Issue 1, January 1994, Pages 29-60.

Domowitz, Ian. A taxonomy of automated trade execution systems. *Journal of International Money and Finance*, Volume 12, Issue 6, December 1993, Pages 607-631.

Domowitz, Ian. The mechanics of automated trade execution systems. *Journal of Financial Intermediation*, Volume 1, Issue 2, June 1990, Pages 167-194.

Donaldson, R. ; Kamstra, M. Forecast combining with neural Network. *Journal of Forecating*, Vol. 15, No. 1, pp. 49-61, 1996.

Feng, Y. ; Yu, R. ; Stone, P. Two Stock-Trading Agents: Market Making and Technical Analysis. *Proc of AMEC V Workshop*, Springer LNAI, pp. 18-36, 2004.

Ferris, Stephen P. ; McInish, Thomas H. ; Wood, Robert A. Automated trade execution and trading activity: The case of the Vancouver stock exchange. *Journal of International Financial Markets, Institutions and Money*, Volume 7, Issue 1, April 1997, Pages 61-72.

Freedman R. et. Al. Artificial intelligence in Capital Markets, Chicago, IL : Probus Pud., 1995.

Gately, E. *Neural Networks for Financial Forecasting*,Wiley & Sons, New York, NY : 1996.

Giraud, Jean-Renĕ. Best Execution for Buy-Side Firms: A Challenging Issue, A Promising Debate, A Regulatory Challenge. *consulting report.* Edhec-Risk Advisory, June 2004.

Gold, C. FX trading via recurrent reinforcement learning. *Proceedings of the IEEE International Conference on Computational Intelligence in Financial Engineering*, 2003, op.cit., 363–371.

Grossman, Randy. The Search for the Ultimate Trade: Market Players in Algorithmic Trading. *consulting report.* Financial Insights, February, 2005.

Harrison, J.M. ; Kreps, D. Martingales and arbitrage in multiperiod securities markets. *J. Econ. Theory*, vol. 20, 1979, pp. 381-408.

Hogan, Steve ; Jarrow, Robert ; Teo, Melvyn ; Warachka, Mitch. Testing market efficiency using statistical arbitrage with applications to momentum and value strategies. *Journal of Financial Economics* 73, 2004, 525–565.

Ingber, L. ; Mondescu, R.P. Optimization of trading physics models of markets. *IEEE Trans. on Neural Networks*, vol. 12, no. 4, 2001, pp. 776-790, http://www.ingber.com/markets01 optim trading.pdf .

Ingber, L. High-resolution path-integral development of financial Options. *Physica A*, vol. 283, no. 3/4, 2000, pp. 529-558, http://www.ingber.com/markets00 highres.ps.gz

Ingber, L. Statistical mechanics of nonlinear nonequilibrium financial markets: applications to optimized trading. *Math. Computer Modelling*, vol. 23, no. 7, 1996, pp. 101-121, http://www.ingber.com/markets96 trading.ps.gz .

Ingber, L. ; Rosen, B. Genetic algorithms and very fast simulated reannealing: a comparison. *Oper. Res. Management Sci.*, vol. 33, no. 5, 1993, p. 523.

Ingber, L. ; Wehner, M.F. ; Jabbour, G.M. ; Barnhill, T.M. Application of statistical mechanics methodology to term-structure bond-pricing models. *Math. Comput. Modelling*, vol. 15, no. 11, 1991, pp. 77-98, http://www.ingber.com /markets91 interest.ps.gz .

Kakade, S. ; Kearns, M. ; Mansour, Y. ; Ortiz, L. Competitive Algorithms for VWAP and Limit Order Trading. *Proc. ACM Conf. Electronic Commerce*, 2004.

Kaufman, P.J. *Trading Systems and Methods*, 3rd ed., John Wiley & Sons, New York, NY : 1998.

Kearns, M. ; Ortiz, L. The Penn-Lehman Automated, Trading Project. *IEEE Intelligent Systems*, No. 6, pp. 22-31, Nov/Dec 2003.

Kingdon, J. Intelligent Systems and financial forecasting. New York, NY : Springer, 1997.

Leemans, V. Real time trading systems. MPhil dissertation, Centre for Financial Research, Judge Institute of Management. Cambridge: University of Cambridge, 2003.

Lucchetti, Aaron ; Lahart, Justin. Your Portfolio on Autopilot, *The Wall Street Journal*. Sep 30, 2006

Madhavan, Ananth ; Porter, David ; Weaver, Daniel. Should securities markets be transparent? *Journal of Financial Markets*, Volume 8, Issue 3, August 2005, Pages 265-287.

Mandelbrot, B.B. *Fractals and Scaling in Finance*, Springer- Verlag, New York, NY : 1997.

Masters, Timothy. Just what are we optimizing, anyway? *International Journal of Forecasting*, Volume 14, Issue 2, 1 June 1998, Pages 277-290.

Moody, J. ; Saffell, M. Learning to trade via direct reinforcement. *IEEE Transactions on Neural Networks*, 12(4), 2001, 875–889.

Moody, J. ; Saffell, M. Minimising downside risk via stochastic dynamic programming. In Y. S. Abu-Mostafa, B. LeBaron, A. W. Lo, & A. S. Weigend (Eds.), *Sixth International conference computational finance,* 1999, pp. 403–415. Cambridge, MA: MIT Press, 1999.

Naidu, G. N. ; Rozeff, Michael S. Volume, volatility, liquidity and efficiency of the Singapore Stock Exchange before and after automation. *Pacific-Basin Finance Journal*, Volume 2, Issue 1, March 1994, Pages 23-42.

Ogryczak, W., & Ruszczyn´ski, A. Dual stochastic dominance and related mean-risk models. SIAM. *Journal on Optimization*, 13(1), 2002, 60–78.

Ogryczak, W., & Ruszczyn´ski, A. From stochastic dominance to meanrisk models: Semideviations as risk measures. *European Journal of Operations* Research, 116, 1999, 33–50.

Perold, A. The Implementation Shortfall: Paper versus Reality. *The Journal of Portfolio Management*, vol. 14, no. 3, Spring 1988, p. 49.

QSG. The implementation Costs of Algorithmic Trading. *consulting report.* Quantitative Services, Group LLC., December 2004.

Ruszczyn´ski, A. ; Vanderbei, R. J. Frontiers of stochastically nondominated portfolios. *Econometrica*, 71(4), 2003, 1287–1297.

Sherstov, A. ; Stone, P. Three Automated Stock Trading Agents: A Comparative Study. *Proc. of the AMEC VI Workshop*, New York, USA, July 2004.

Silaghi, Gheorghe Cosmin ; Bolyai, Babes. An Agent Strategy for Automated Stock Market Trading Combining Price and Order Book Information. University Faculty of Economic Sciences, Cluj-Napoca, Romania

Skabar, A. ; Cloete, I. Discovery of Financial Trading Rules. *Proc. Artificial Intelligence and Applications*, pp. 121-125, 2001.

Stone, P. ; Littman, M. ; Singh, S. ; Kearns M. ATTac-2000: An adaptive autonomous bidding agent. Journal of Artificial Intelligence Research, no. 15, June 2001, pp. 189-206.

Tabb, Larry. Institutional Equity Trading in America: A Buy-Side Perspective. *consulting report*, The Tabb Group, April 2004.

Venturi S. Evolutionary algorithms for currency trading. PhD thesis, Centre for Financial Research, Judge Institute of Management, University of Cambridge, 2003.

Wofsey, M. Technology: shortcut tests validity of complicated Formulas. *The Wall Street Journal*, vol. 222, no. 60, 1993, p.B1.

Wurman, P.; Wellman, M. ; Walsh W. The Michigan Internet AuctionBot: a configurable server for human and software agents. *Second international conference on autonomous agents*, Mineapolis, pp 301-308.

Xufre Casqueiro, Patrícia ; Rodrigues, António J.L. Neuro-dynamic trading methods. *European Journal of Operational Research*, Volume 175, Issue 3, 16 December 2006, Pages 1400-1412.

Yang, J., and M. Borkovec. Algorithmic Trading: Opportunities and Challenges. *Financial Engineering News*, No. 46, November/December 2005, pp.14-15.

Ygge, F. Market-oriented programming and its application to power load management. Ph.D. Thesis, Lund University, 1998.

Yu, Ronggang ; Stone, Peter. Performance Analysis of a Counterintuitive Automated StockTrading Agent. Department of Computer Sciences, The University of Texas at Austin, www.cs.utexas.edu/~ryu