

Dr Rob J. Hyndman

Curriculum Vitae

June 2000

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Personal

Date of birth: 2 May 1967
Family: Married with four children

Education and Qualifications

1988 B.Sc.(Hons) University of Melbourne
1992 Ph.D. University of Melbourne
2000 A.Stat. Statistical Society of Australia.

Honours and awards

1986 Second Maurice H. Belz Prize in Statistics, University of Melbourne
1987 Norma McArthur Prize in Statistics, University of Melbourne
1988 Dwights Prize in Statistics, University of Melbourne
1988 First Class Science Faculty Honours, University of Melbourne
1990 Finalist, Channel Ten Young Achiever Awards
1997 Citation of excellence by ANBAR for Hyndman (1995)
1998 Award for excellence in teaching, Monash Science Society
1998–2001 Entry in Marquis *Who's Who in the World*, 15th – 18th editions.
2000 Entry in *Who's Who in Asia and the Pacific Nations*, 4th edition.
2000 Entry in *Cambridge Dictionary of International Biography*, 28th edition.
2000 Entry in *Outstanding People of the 20th Century*, 2nd edition.

Career to date

1999– **Director of Consulting**, Department of Econometrics and Business Statistics, Monash University.
1998– **Senior Lecturer**, Department of Econometrics and Business Statistics, Monash University.
1998 **Visiting Professor**, Department of Statistics, Colorado State University.
1997–98 **Director**, Key Centre for Statistical Science, Melbourne, Australia.
1996–98 **Director**, Monash University Statistical Consulting Service.
1995–98 **Lecturer/Senior Lecturer**, Department of Mathematics and Statistics, Monash University.
1993–94 **Lecturer**, Department of Statistics, University of Melbourne.
1985–92 **Statistical consultant**, Department of Statistics, University of Melbourne.

Membership of Associations

- Member, American Statistical Association.
- Member, Statistical Society of Australia (Secretary, Victorian branch, 1993–1995).
- Member, International Institute of Forecasters.

Research and scholarship

I mainly work in time series analysis, forecasting, and nonparametric smoothing. Since 1991 I have authored 34 papers, chapters or books on statistical topics; 17 of these have been refereed.

My current research projects include non-Gaussian time series models, generalized additive models for time series, exponential smoothing, and conditional density estimation. I currently supervise 4 Ph.D. students.

I am coauthor of the third edition of *Forecasting: methods and applications* (1998). This is the leading textbook in Business Forecasting and is very widely used internationally. I am also the author of an Instructor's manual for the book and maintain the associated web site.

Other professional activities

- Book Review Editor, *Australian and New Zealand Journal of Statistics*, 1996–.
- Joint editor, *InterStat* (an electronic refereed journal), 1998–.
- Since 1985, I have worked as a statistical consultant with a large range of clients. These projects have involved forecasting and time series analysis, business modelling, the analysis of surveys and experimental data, developing models of the financial market, operations research, transport analysis, telecommunications analysis, data collection and reporting systems, clinical trials, experimental design, and simulation. I have produced over 60 written reports for clients and worked with well over 200 different clients.
- I have been a member of the Scaling committee of the Victorian Tertiary Admissions Centre since 1994. This committee is responsible for the scaling of VCE marks and the algorithm for producing a tertiary entrance rank for each student.

Hobbies and interests

Outside statistics, much of my time is spent with my family and in activities involving the Christadelphian church. I have written four books on biblical topics and speak regularly at Christadelphian meetings and conferences.

List of Publications

Refereed articles or chapters

- BROCKWELL, P.J., HYNDMAN, R.J. and GRUNWALD, G.K. (1991) Continuous time threshold autoregressive models, *Statistica Sinica*, **1**, 401–410.
- BROCKWELL, P.J. and HYNDMAN, R.J. (1992) On continuous time threshold autoregression, *Int. J. Forecasting*, **8**, 157–173.
- HYNDMAN, R.J. (1993) Yule–Walker estimates for continuous-time autoregressive models, *J. Time Series Anal.*, **14**, 281–296.
- HYNDMAN, R.J. (1994) Approximations and boundary conditions for continuous time threshold autoregressive processes, *J. App. Probability*, **31**, 1103–1109.
- AXFORD, R., GRUNWALD, G. and HYNDMAN, R. (1995) “The use of information technology in the conduct of research”, Invited chapter in *Health informatics: an overview*, (ed. Hovenga, Kidd, Cesnik).
- HYNDMAN, R.J. (1995) Highest density forecast regions for non-linear and non-normal time series models, *J. Forecasting*, **14**, 431–441.
- HYNDMAN, R.J. (1996) Computing and graphing highest density regions, *Amer. Statist.*, **50**, 120–126.
- HYNDMAN, R.J., BASHTANNYK, D.M. and GRUNWALD, G.K. (1996) Estimating and visualizing conditional densities, *J. Comput. Graph. Stat.*, **5** (4), 315–336.
- HYNDMAN, R.J. and FAN, Y. (1996) Sample quantiles in statistical packages, *Amer. Statist.*, **50**, 361–365.
- GRUNWALD, G.K., HAMZA, K. and HYNDMAN, R.J. (1997) Some properties and generalizations of Bayesian time series models, *J. Roy. Statist. Soc. B*, **59**, 615–626.
- HYNDMAN, R.J. and WAND, M.P. (1997) Non-parametric autocovariance estimation, *Aust. J. Stat.*, **39**, 313–324.
- LAJBCYJIER, P., FLITMAN, A., SWAN, A. and HYNDMAN, R. (1997) The pricing and trading of options using a hybrid neural network model with historical volatility, *NeuroVe\$ Journal*, **5**, 27–41.
- GRUNWALD, G.K. and HYNDMAN, R.J. (1998) Smoothing non-Gaussian time series with autoregressive structure, *Computat. Statist. and Data Anal.*, **28**, 171–191.
- HYNDMAN, R.J. (1999) Nonparametric additive regression models for binary time series, *Proceedings, 1999 Australasian Meeting of the Econometric Society*, 7–9 July 1999, University of Technology, Sydney.
- HYNDMAN, R.J., and GRUNWALD, G.K. (2000) Generalized additive modelling of mixed distribution Markov models with application to Melbourne’s rainfall. *Australian and New Zealand J. Statistics*. **42** (2), 145–158.
- FRACCARO, R., HYNDMAN, R.J., and VEEVERS, A. (2000) Residual diagnostic plots for model mis-specification in time series regression. *Australian and New Zealand J. Statistics*. To appear.
- GRUNWALD, G.K., HYNDMAN, R.J., TEDESCO, L.M., and TWEEDIE, R.L. (2000) Non-Gaussian conditional linear AR(1) models. *Australian and New Zealand J. Statistics*. To appear.
- BASHTANNYK, D.M., and HYNDMAN, R.J. (2001) Bandwidth selection for kernel conditional density estimation. *Computat. Statist. and Data Anal.* To appear.

Unpublished research papers

- HYNDMAN, R.J. (1995) The problem with Sturges’ rule for constructing histograms.
- GRUNWALD, G.K., HYNDMAN, R.J., and TEDESCO, L.M. (1996) A unified view of linear AR(1) models, Working paper, Department of Statistics, University of Melbourne.
- HYNDMAN, R.J., and YAO, Q. (1998) Nonparametric estimation and symmetry tests for conditional density functions. Working paper 17/98, Department of Econometrics and Business Statistics, Monash University.
- PREDAVEC, M., KREBS, C.J., DANELL, K., and HYNDMAN, R.J. (1998) Cycles and synchrony in the collared lemming (*dicrostonyx groenlandicus*) in the high Arctic, North America. Submitted.
- ERBAS, B., and HYNDMAN, R.J. (2000) The effect of air pollution & climate on hospital admissions for chronic obstructive airways disease: a non-parametric alternative. Submitted.

Monographs

- BROCKWELL, P.J., DAVIS, R.A. and HYNDMAN, R.J. (1991) *ITSM: an interactive time series modelling package for the PC*, Springer-Verlag: New York.
- BROCKWELL, P.J., DAVIS, R.A., and HYNDMAN, R.J. (1994) *ITSM for Windows: a users guide to time series modelling and forecasting*, Springer-Verlag: New York.
- MAKRIDAKIS, S., WHEELWRIGHT, S.C., and HYNDMAN, R.J. (1998) *Forecasting: methods and applications*, 3rd ed., John Wiley & Sons: New York.
- MAKRIDAKIS, S., WHEELWRIGHT, S.C., and HYNDMAN, R.J. (1998) *Forecasting: methods and applications: instructor’s manual*, 3rd ed., John Wiley & Sons: New York.

Other statistical publications

- HYNDMAN, R.J. (1987) Calculating the odds, In *Faces of gambling*, Proceedings of the second national conference of the National Association for Gambling Studies (1986), ed. Michael Walker. pp.139–152.
- HYNDMAN, R.J. (1992) *Continuous-time threshold autoregressive modelling*. Ph.D. thesis, The University of Melbourne.
- HYNDMAN, R.J. (1996) Book review of “Kernel smoothing” by Wand and Jones (Wiley, 1995), *J. Applied Statistics*, **23**, 677–678.
- HYNDMAN, R.J. (1998) Book review of “Smoothing methods in Statistics” by Simonoff (Springer, 1996), *Australian and New Zealand Journal of Statistics*, **40**(2), 251–252.
- HYNDMAN, R.J. (1998) Book review of “Leading personalities in Statistical Science” edited by Kotz and Johnson (Wiley, 1998), *Australian and New Zealand Journal of Statistics*, **40**(3), 382–383.
- HYNDMAN, R.J. (1999) Book review of “A Primer of Mathematical Writing” by Steven G. Krantz (AMS, 1997) and “Handbook of Writing for the Mathematical Sciences”

by Nicholas J. Higham (SIAM, 2nd ed., 1998, *Australian and New Zealand Journal of Statistics*, 41(2), 252–253.

HYNDMAN, R.J. (1999) Book review of “Statistically speaking: a dictionary of quotations” compiled and arranged by Gaither and Cavazos-Gaither (Institute of Physics, 1996), *Australian and New Zealand Journal of Statistics*, 41(3), 380–382.

HYNDMAN, R.J. (1999) Book review of “Chance encounters: a first course in data analysis and inference” by C.J. Wild and G.A.F. Seber. (Wiley, 2000), *Australian and New Zealand Journal of Statistics*, 41(4) 494–495.

Statistical consulting reports

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 44, Stud Poker*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 46, Fruit Poker*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 49, Classical Blackjack*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 50, Coin Toss*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 51, 20/22 Keno*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1986) *Report No. 52, Comments on Draw Poker VII*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 58, Coin Toss II*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 59, Super-8-Ways*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 61, Keno II*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 68, Super-8-Ways (with a joker)*, Statistical Consulting Centre, University of Melbourne.

BROWN, T.C. and HYNDMAN, R.J. (1986) *Report No. 69, Five Ways*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. and BROWN, T.C. (1987) *Report No. 83, Comments on Draw Poker VII*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. and SHARPE, K. (1987) *Report No. 100, Draw Poker IX*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. and SHARPE, K. (1987) *Report No. 101, Draw Poker X*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1988) *Local Call Holding Times*, Report for Telecom Australia.

HYNDMAN, R.J. (1988) *A Statistical Analysis of Conversation*

Times for Local Calls, Report for Telecom Australia.

JARRETT, R.G. and HYNDMAN, R.J. (1989) *Report No. 148, Personnel Industry Survey*, Statistical Consulting Centre, University of Melbourne.

JARRETT, R.G. and HYNDMAN, R.J. (1989) *Report No. 154, Maternal Temperament and Coping Scale*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. and JARRETT, R.G. (1989) *Report No. 155, Modelling Financial Market Behaviour*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1989) *Report No. 167, FOREX: A Computer Program for Modelling Financial Market Behaviour*, Statistical Consulting Centre, University of Melbourne.

SHARPE, K. and HYNDMAN, R.J. (1989) *Report No. 180, Evaluation of NIR Machines for Measuring the Protein Content of Wheat — 88–89 Field Trials*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. and JARRETT, R.G. (1989) *Report No. 182, Survey of Professional and Staff Development Needs*, Statistical Consulting Centre, University of Melbourne.

DICKINSON, T. and HYNDMAN, R. (1989) *Report No. 188, Modelling Taxation Accounts II*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1989) *Report No. 189, A Time Series Analysis of Gold Prices*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1989) *Report No. 192, Further Descriptive Statistics of Gold Prices*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1989) *Report No. 195, Further Notes on the Statistical Analysis of Gold Prices*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1989) *Statistical Reporting*, Report for Mid Eastern Palliative Care Association.

HYNDMAN, R.J. (1990) *Report No. 206, A Time Series Analysis of Monthly and Yearly Gold Price Data*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1990) *Report No. 209, FOREX II*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1990) *Data Collection*, Report for Mid Eastern Palliative Care Association.

HYNDMAN, R.J. (1990) *Report No. 224, Passenger Motor Vehicle Sales in Australia*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1990) *Report No. 227, Forecasting Passenger Motor Vehicle Sales in Australia*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1991) *Report No. 277, Comments on the Systat-Statsoft Debate*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1991) *The MEPCA Statistical System*, Report for Mid Eastern Palliative Care Association.

HYNDMAN, R.J. (1992) *Report No. 281, Assessing the Classroom Performance of NESB Teachers*, Statistical Consulting Centre, University of Melbourne.

HYNDMAN, R.J. (1992) *Report No. 282, Monthly Reporting of Electricity Sales and Revenue and End-of-Year Projections*, Statistical Consulting Centre, University of Melbourne.

- HYNDMAN, R.J. (1992) *Report No. 292, Comments on Linear Regression and the Variance Ratio*, Statistical Consulting Centre, University of Melbourne.
- HYNDMAN, R.J. (1992) *Report No. 308, Evaluation of a Random Breath Testing Initiative in Victoria: 1990*, Statistical Consulting Centre, University of Melbourne.
- HYNDMAN, R.J. (1993) *Report No. 323, A Time Series Modelling Approach to Forecasting Airline Passenger Traffic*, Statistical Consulting Centre, University of Melbourne.
- HYNDMAN, R.J. (1993) *Report No. 326, Some Notes on the Implementation of Airline Passenger Traffic Forecasting*, Statistical Consulting Centre, University of Melbourne.
- HYNDMAN, R.J. (1994) *Statistical Modelling of Sale Values of ORIX Vehicles*, Data Analysis and Statistical Services.
- HYNDMAN, R.J. and HURST, F.K. (1995) *Analysis of needle protector trial data: bloodpack needle protector*, Monash University Statistical Consulting Service.
- HYNDMAN, I.T. and HYNDMAN, R.J. (1995) *Palliative Care Case Finding Survey*, SPICE Management Consulting Services.
- HYNDMAN, R.J. and HURST, F.K. (1995) *Analysis of needle protector trial data: AV fistula needle protector in apheresis units of BTS*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. and HURST, F.K. (1995) *Analysis of needle protector trial data: AV fistula needle protector in haemodialysis units*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. (1996) *Work done for Olympic Amusements Pty Ltd*, Data Analysis and Statistical Services.
- HYNDMAN, R.J. and ARACHIGE, D. (1996) *Risk factors for melanoma*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. and ARACHIGE, D. (1996) *Tax agent program for individual tax payers: review of claims on work-related expenses*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. and NGUYEN, T. (1996) *The effect of bird mix on growers*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J., L. THOMAS, and MCCLOUD, P.I. (1996) *Interim report for microbiological diagnostic unit, Department of Microbiology, University of Melbourne*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. (1997) *Review of CQU report on Work Related Expense audit*, Data Analysis and Statistical Services.
- HYNDMAN, R.J. (1997) *Comments on alleged anomalies in the Work Related Expenses audit program*, Data Analysis and Statistical Services.
- HYNDMAN, R.J. (1997) *Formulae for use in analyzing Life Survey data*, Data Analysis and Statistical Services.
- MCCLOUD, P.I., HYNDMAN, R.J., and ARACHIGE, D. (1997) *Immunogenicity and clinical tolerability of FLUVAX inactivated influenza vaccine (split virion) on adults*, Monash University Statistical Consulting Service.
- MCCLOUD, P.I., HYNDMAN, R.J., and ARACHIGE, D. (1997) *Immunogenicity and clinical tolerability of FLUVAX inactivated influenza vaccine (split virion) on elderly adults*, Monash University Statistical Consulting Service.
- ARACHIGE, D., and HYNDMAN, R.J. (1997) *A double blind, placebo controlled study, comparing the efficacy of a garlic-inulin supplement in the treatment of patients with mild to moderate hypercholesterolaemia*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. (1998) *Comments on the application by the MCC for certification of an enterprise agreement*, SPICE Consulting.
- HYNDMAN, R.J. (1998) *C Code for exponential forecasting*, Data Analysis and Statistical Services.
- HYNDMAN, R.J. (1998) *Unit cost analysis for disability services*, Monash University Statistical Consulting Service.
- HYNDMAN, R.J. (1999) *Analysis of electrode readings on an 18-pier bridge*, Report for Centre for Advanced Materials Technology.
- HYNDMAN, R.J. (1999) *Review of personal loan application decision model*, Report for National Australia Bank.
- ABEYEWARDENE, K., and HYNDMAN, R.J. (2000) *Forecasting total telecommunications market in Australia: Telstra's market share*, Report for Telstra Australia.
- STRACHAN, R., and HYNDMAN, R.J. (2000) *Forecasting total telecommunications market in Australia: retain revenue forecasts on a product cluster basis*, Report for Telstra Australia.
- HYNDMAN, R.J., and FRY, T.R.L. (2000) *Brand and reputation model for key metrics*, Report for Telstra Australia.
- HYNDMAN, R.J. (2000) *Analysis of normative data from the recognition subtest in paediatric optometry*, Report for Howard, Croucher and Associates.

Non-statistical books

- HYNDMAN, R.J. (1991) *The Times: a chronology of the Bible*, 2nd ed., Bethel Publications: Melbourne. (1st edition, 1989).
- HYNDMAN, R.J. (ed) (1997) *Taking control: a guide for youth*, Melbourne Christadelphian Sunday Schools.
- HYNDMAN, R.J. (1998) *Learn to read the Bible effectively*, Bethel Publications: Melbourne. (previous editions, 1989, 1992, 1996).
- HYNDMAN, R.J. (2000) *The Story of the Bible*, Bethel Publications: Melbourne. (previous edition, 1998).