

Margot Tollefson, Ph.D.

address: 612 Teneyck Avenue / P.O. Box 286
Stratford, Iowa 50249-0286
email: margot@vanwardstat.com
website: <http://vanwardstat.com>
phone & fax: (515) 838-2383

QUALIFICATIONS

Proven track record of success with over twenty-one years of varied technical and professional experience that ranges from consulting, teaching, hands-on statistical analysis and programming to management of personal work efforts requiring planning, communication, and leadership skills and abilities.

Broad-based education. Advanced degrees in statistics. Undergraduate degree in physics. Major course work in economics.

Learns new computer languages and systems quickly and easily. Proficient in R. Uses Microsoft Office. Used SAS at ISU.

Highly independent work habits, employers have trusted her to work with little supervision.

EXPERIENCE

Owner, Vanward Statistics, Stratford, IA: September 2013 to Present

Statistical consultancy. Provides advice on statistical modeling. Doing modeling for research topics. Provides advice on a sampling problems. Uses R. Is starting doing data mining and text analysis.

Owner, Vanward Statistical Consulting, Stratford, IA: September 2010 to August 2013

Statistical consultancy: Provided advice on statistical modeling. Did modeling for research topics of interest. Used R.

Adjunct Faculty, Iowa Central Community College: Fort Dodge, IA, January 2008 to December 2008

Taught a course in introductory statistics for two semesters

Research Assistant (part time), Iowa State University, Ames, IA: September 1992 to April 1994, April 1998 to April 1999, and August 1999 to November 1999

Worked for the Statistical Laboratory, imputing data for the 1992 Natural Resources Inventory using SAS and creating and running programs for the 1996 National Research Inventory using SAS.

Graduate Assistant (part time while student), Iowa State University, Ames, IA, August 1983 to July 1992, with two semester long breaks

13 semesters as Laboratory Assistant working with students, 3 semesters as Research Assistant working with the Nuclear Engineering Department, and 3 semesters as a Research Assistant working on the theory behind variance estimation, for the imputation of the 1992 National Resources Inventory.

Research Associate, Massachusetts Institute of Technology, Cambridge, MA: February 1981 to July 1983

Ran experiments in an aerosol laboratory which were environmentally related to coal consumption. Some FORTRAN and BASIC programming.

Statistician, Oscar Mayer, Perry, IA: June 1984 to August 1984

Modeled worker performance and wrote program on BASIC to evaluate worker performance based on sampling the work of the employees.

Research Assistant, Aerodyne Research, Inc., Bedford, MA: March 1979 to November 1980

Mainly ran computer programs for analyzing atmospheric transmissions. Also modeled three dimensional problems. Some FORTRAN programming.

Worker, Boston Survey Consultants, Boston, MA: September 1977 to August 1978
Worked on the survey crew, making prints, sorting files, and going to courthouses for records.

Scientific Aide, Environmental Protection Agency, Corvallis, OR: June 1976 to November 1976
Ran seawater samples on an atomic absorption spectrophotometer to detect trace amounts of Cr.

EDUCATION

Ph.D. Statistics Iowa State University, Ames, Iowa - 1992
Thesis: Variance Estimation under Random Imputation

M.S. Statistics Iowa State University, Ames, Iowa - 1985

B.A. Physics Reed College, Portland, Oregon - 1974

Continuing Education:

Massachusetts Institute of Technology, Cambridge, Massachusetts - 1982-83
6 semester hours mathematics

Harvard University (C.C.E.), Cambridge, Massachusetts - 1980-83
36 semester hours statistics & economics (24 hours in economics)

Northeastern University (Lincoln College), Boston, Massachusetts - 1979-80
12 quarter hours mathematics and computer science

PRESENTATIONS

"Variance Estimation for Samples with Random Imputation." American Statistical Association's Joint Meetings, Boston, 1992.

PUBLICATIONS

Tollefson, M. 2015. Conservative confidence intervals for the hypergeometric distribution using R. *International Researchers*, **4** 3

Tollefson, M. 2014. *R Quick Syntax Reference*. Apress. New York, NY.

Tollefson, M. 2007. Art and science: finding their complementary tools in a chart. *Dell Horoscope*. 73 3, 67-68, 102.

Tollefson, M. 2005. Some statistical tests on facial expressions. *ISAR International Astrologer: Exploring Research and Astrology, Volume Two - Research Studies*. 33 3, 63-67.

Tollefson, M. 1995. The Boulder "A" index isn't the way: a Ph.D. in statistics looks at our Boulder "A" index study. *Low Band Monitor*, 3, #1.

Tollefson, M. 1995. Testing for seventh house rulership using the Gauquelin heredity data set, *The Schneider-Gauquelin Research Journal: Astro-Psychological Problems*, 11, 18-19.

Tollefson, M. and Fuller, W. A. 1992. Variance estimation for samples with random imputation. *Proceedings of the Section on Survey Research Methods*, 15th ed. American Statistical Association. Alexandria, VA.

PROFESSIONAL MEMBERSHIPS

American Statistical Association, Mu Sigma Rho, International Society for Astrological Research, American Federation of Astrologers, National Council on Geocosmic Research, Iowa Association for Energy Efficiency

INTERESTS

Survey sampling, multivariate analysis, analysis of count data, time series and analysis of economic data; expanding into data mining and text analysis.