

Current Address: Department of Statistics,
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Personal:

- Male
- Married, with one child

Research Interests: Distribution Theory, Quantile Regression, Robust Regression, Generalised Linear Mixed Models, Analytics and Data mining, Variational Approximations, Graphical Models, Time Series, Bayesian Calculation.

Education:

2005–2011 Ph.D. in Statistics, Department of Statistics, Shiraz University, Shiraz, Iran.
Ph.D. Thesis: **The two-piece normal Laplace distribution.**

2001–2003 Master of Science in Mathematical Statistics, Department of Statistics, Shiraz University, Shiraz, Iran.
Master Thesis: **Hypothesis testing in two-stage cluster sampling.**

1996–2000 Bachelor of Science in Statistics, Department of Statistics, Payam-e-Nour University of Shiraz, Shiraz, Iran.
Bachelor Project: **Regression with Minitab.**

Professional Experience:

A) Teaching:

**Teaching Lab Assistant and Marking
in Stats 10x, 20x, Maths 10x**

2007–2008 & 2011–

Two years at Auckland University for science, engineering and business students.

Quantitative Business Methods

2011–Pres.

One year at some institutes in New Zealand for information technology, marketing and business students.

Electrotechnology Mathematics

2012–Pres.

One semester in Queens Academic Group in New Zealand for national diploma in engineering students.

**Engineering Statistics, Applied
Statistics**

2002–2007

Two years at Shiraz University for engineering students. (c. 60 students)

One year at Shiraz University for economic students.
Five semesters at Yasouj University for engineering students.
Two years at Azad University (various branches) for engineering and biology students.
(c. 70 students)

General Mathematics

2004–2006

One year at Shiraz University for Social Sciences students. (c. 50 students)
Five semesters at Yasouj University for Engineering students, Mathematics and Physics students.

**Time Series, Sampling Methods,
Mathematical Statistics**

2005–2007

Two semesters at Payam-e-Nour University of Shiraz for Statistics students.
Two semesters at Azad University Jahrom Branch for Statistics students.

Statistical Computing with R

2008–2009

One year at Shiraz University for Postgraduate statistics students.

Supervision

2002–2009

Supervised 10 students for final year Bachelor's Projects overall.

B) Statistical Consulting:

- Statistical consultant at Shiraz University of Medical Sciences, 2005–2007
- Statistical advisor at Fars Mabnanegar Management Company, 2008–2010

C) Private Tutoring:

Statistics and Mathematics

2000–2011

Tutoring for over 10 years as a private tutor. (Over 2 years in New Zealand) I have experience in tutoring Statistics and Maths and other related subjects:
Auckland University: Stats 10x, 20x, Maths 101, 102, 108.
Massey and AUT University: Stage 1 and stage 2 Statistics and Maths
Unitec and other Institutes: Business Statistics.
In addition, I have experience in tutoring Statistics and Maths in NCEA and Cambridge.

D) Workshops & Short Courses :

**A short course on Statistical Quality
Control**

May 2001

For industrial employees at ITMC company, Shiraz branch. (c. 30 learners)

**A short course on Statistical
Techniques**

June 2005 & May 2006

For government employees at Komiteh Emdad, Shiraz, Iran. (c. 160 learners)

**A short course on Statistical
Methods for Research**

November 2008

For government employees at Social Security Organization, Fars Branch, Shiraz, Iran.
(c. 45 learners)

Accepted Papers and Preprints:

1. 2011 Arash Ardalan, S. M. Sadooghi-Alvandi and A.N. Nematollahi, The Two-Piece Normal-Laplace Distribution, 35 pages (Comm. in Statist.: Theory & Methods. Accepted).
2. 2010 Arash Ardalan, A.N. Nematollahi and S. M. Sadooghi-Alvandi, On the Pisarenko-type high resolution estimator, 27 pages under review.

Papers Under Consideration for Publication:

1. Quantile Regression Using The Idea of Bayesian Semiparametric Regression. (Joint with Wand, M.P.)
2. The VGAM Package for Quantile and Robust Regression. (Joint with Yee, T. W.)
3. On Asymmetric Quadratic Loss Function and Application of it in Quantile Regression. (Joint with Yee, T. W.)
4. A Note On Asymmetric and Two-piece Laplace Distribution and Application of it on L_1 Asymmetric Loss Function: a Bayesian Study. in Quantile Regression.
5. Mean Field Variational Bayes for a Family of Two-piece Elaborate Distributions.

Conference Papers:

1. Ardalan, A., Wand, M. P. & Yee, T. W. **Expectile and Quantile Regression Using the Idea of Bayesian Semiparametric Regression**, The International Biometric Society Australasian Region Conference, 4–8 December 2011, Kiama, New South Wales, Australia.
2. Ardalan, A. & Yee, T. W. **Quantile Regression via Two-piece Normal Distribution**, NZSA 2011 Conference, 28–31 August 2011, Auckland University, Auckland, New Zealand.
3. Ardalan, A., Sadooghi-Alvandi, S. M. Nematollahi, A. N. Mardani-Fard H. A. **A Generalized Normal-Laplace Distribution: Properties, Estimation and Applications**, International Conference on Statistical Methodologies and Related Topics, 29 June–1 July 2010, Massey University, Palmerston North, New Zealand.
4. Ardalan, A., H. A. Mardani-Fard. **A New Approach to Quantile Regression**, International Conference of Mathematical Sciences, 04–10 August 2009, Maltepe University, Istanbul, Turkey.
5. Ardalan, A. Nematollahi, A.N. **High Resolution Estimation of Spectral Density Function**, The first workshop in applied stochastic processes, April 22–24, 2007, University of Technology, Isfahan, Iran.

**Professional
Certificates**

- Certificate of Achievement for NZQA 4098 Unit Standard – 2012
NZQA = New Zealand Qualifications Authority
Unit Standard 4098 = Assessment of Candidate Performance
- Certificate of Competence in Tutoring – 2012
The University of Auckland, New Zealand

Research Visits:

- May 2007–Jan 2008, Department of Statistics, University of Auckland, New Zealand.
- April 2010–Jan 2011, Department of Statistics, University of Auckland, New Zealand.

**Honours and
Awards:**

- 2000 2nd place average in the B.Sc. in the Department of Statistics of Shiraz University, among about 50 students.
- 2001 4th place in the Statistical Competition of Iranian Bachelor Students.
- 2001 10th place in the Entrance Examination for M.Sc. among 2119 applicants.
- 2004 2nd place in the Entrance Examination for Ph.D. among 30 applicants.

Computing Skills:

Operating Systems: Windows, Linux/Unix.

Software: R, Matlab, Maple, Excel, S-Plus, Minitab, SPSS, SAS, L^AT_EX, Winbugs.

Memberships:

- Iranian Statistical Society
- New Zealand Statistical Association

**Personal
Attributes and
Hobbies:**

I love to work with data and analyze it by modern/theoretical statistical methods. I enjoy soccer, tennis and music.

Referees:

1. T. Lumley, Professor of Biostatistics, Department of Statistics, University of Auckland, Auckland 1142, Private Bag 92019, New Zealand, tel.: +64 9 373 7599 ext 83785 , fax: 64-9-3737018, E-mail: t.lumley@auckland.ac.nz.
2. D. Smith, Senior Tutor, Department of Statistics, University of Auckland, Auckland 1142, Private Bag 92019, New Zealand, tel.: +64 9 373 7599 ext 85390 , fax: 64-9-3737018, E-mail: dp.smith@auckland.ac.nz.
3. S. M. Sadooghi-Alvandi, Professor of Statistics, Shiraz University, Shiraz, Iran, 71454, tel.: +98 711 22988197, fax: +98 711 2280926, E-mail: smsa51@hotmail.com.
4. A. R. Nematollahi, Associate Professor in Statistics and Probability, Shiraz University, Shiraz, Iran, tel.: +98 711 22988197, fax: +98 711 2280926, E-mail: nematollahi@susc.ac.ir