

# Curriculum Vitae (CV)

Alireza Ghodsi

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## Personal Information:

- Date of birth: 28 Jan. 1971
- Marital status: Married - one son
- Nationality: Iranian
- Languages: Farsi, English

## Job position:

- Assistant Professor, Hakim Sabzevari University, 1998 - present

## Educations:

- **B.Sc.** Statistics, Feb. 1994, Ferdowsi University of Mashhad, Iran, Grade Point Average of 20: 16.09
- **M.Sc.** Statistics, Feb. 1998, Ferdowsi University of Mashhad, Iran, Grade Point Average of 20: 17.84
- **PhD:** Spatial Modelling, Feb. 2012, Universiti Putra Malaysia, Malaysia, Total Average of 4: 3.946

## Research interests:

- Spatial Models, Integer-Valued Time series, Regression Analysis, Mathematical Statistics

## Teaching Experiences:

- Statistics and Probability; undergraduate course
- Time Series; undergraduate and Master course
- Stochastic Processes; undergraduate course
- Mathematical Statistics; undergraduate course
- Sampling Methods; undergraduate course
- Experimental Design; undergraduate course
- Non-parametric Methods; undergraduate course
- Queuing Theory; undergraduate course
- Survival Analysis; undergraduate course

- Statistical inference; Master course
- Time Series; Master course

**M.Sc. Thesis Title:**

- Comparison the Power Function of the Analysis of Variance and Multivariate Linear Regression Tests

**PhD Thesis Title**

- Properties and Estimation for Fractionally Integrated Spatial Models and Non-Negative Integer-Valued Autoregressive Spatial Models

**Publications:**

Book:

- Ghodsi, A. (2005). *Statistics and Probability*. Tarbiat Moallem University of Sabzevar , Iran ( **In Persian**).

Papers:

1. **Alireza Ghodsi** and Mahendran Shitan (2009). Estimation of the memory parameters of the fractionally integrated separable spatial autoregressive (FISSAR(1,1)) model: A simulation study. *Communication in Statistics-Simulation and Computation* 38(6), 1256-1268.
2. **Alireza Ghodsi**, Mahendran Shitan and Hassan Bakouch (2012). A first-order spatial integer-valued autoregressive SINAR(1,1) model. *Communication in Statistics-Theory and Methods* 41, 2773–2787.
3. Hazel Monica Matias-Peralta, Alireza Ghodsi, Mahendran Shitan and Fatimah Md. Yusoff (2012). Probability models for the distribution of copepods in different coastal ecosystems along the straits of Malacca. *International Journal of Modern Physics: Conference Series (IJMPCS)*, 9, 316-325.
4. **Alireza Ghodsi** and Mahendran Shitan (2013). First-order fractionally integrated non-separable spatial autoregressive (FINSSAR(1,1)) model and some of its properties. *Pakistan Journal of Statistics and Operation Research*. 9(1):1-16.
5. **Alireza Ghodsi** and Mahendran Shitan (2013). Some Properties of the normalised periodogram of fractionally integrated separable spatial ARMA (FISSARMA) models. *Communication in Statistics-Theory and Methods*. 42(8): 1515-1530.
6. **Alireza Ghodsi** and Mahendran Shitan (2015). Autocovariance function of the fractionally integrated separable spatial ARMA (FISSARMA) Models. *Communication in Statistics-Theory and Methods*, 44(5):933-941.
7. Maryam Golkhatmi Bidgoli, Aghdas Saadati, Amin Asghari, Masoomeh Saadati, **Alireza Ghodsi**, Azam Golkhatmi Bidgoli (2015). Analyzing the relationship between the perception of organizational justice and organizational commitment. case study: Neyshabur medical science college. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(3): 83–90.
8. Amin Asghari, Seyedeh Masoomeh Saadati, Sadaf Ahmadpour, **Alireza Ghodsi**, Atefeh Vaezi (2015). Communication and collaboration's nurse with

physician from the perspective of hospitals nurse in Neyshabur City in 2013. *Scholars Journal of Applied Medical Sciences*, 3(9C):3335-3341.

**9. Alireza Ghodsi. (2015).** Conditional Maximum Likelihood Estimation of the First-Order Spatial Integer-Valued Autoregressive (SINAR(1,1)) Model. *Journal of the Iranian Statistical Society*, 14(2): 15-36.

**10. Amin Asghari, Seyedeh masoomeh Saadati, Alireza Ghodsi, Fatemeh Aziz Fard (2015).** Review the academic burnout and its relationship with self-esteem in students of medical sciences university at Neyshabour. *Scholars Journal of Applied Medical Sciences*, 3(9C):3329-3334.

**11. Amin Asghari, Seyedeh Masoomeh Saadati, Sadaf Ahmadpour, Alireza Ghodsi, Mliheh Ameri (2015).** Reviewing moral distress and its related factors from the perspective of hospitals nurse in Neyshabur City in 2013. *Scholars Journal of Applied Medical Sciences*, 3(9D):3380-3386.

**12. Maryam Bidgoli Golghatmi, Aghdas Saadati, Seyyedeh Masoomeh Saadati, Alireza Ghodsi (2015).** The study of the relationship between organizational justice, organizational commitment and job satisfaction of staff members of Neyshabur university of medical sciences in 2014. *Journal of Business Management and Economics*, 3(10): 14-20.

**13. Masoomeh Saadati, Aghdas Saadati, Amin Asghari, Maryam Golkhatmi Bidgoli, Alireza Ghodsi, Azam Golkhatmi Bidgoli (2016).** The relationship between perceived organizational justice, organizational commitment and job satisfaction. *Health, Spirituality and Medical Ethics*, 3(1):10-17.

**14. Amin Asghari, Atefeh Dehnoalian, Masoomeh Saadati, Sadaf Ahmadpour, Alireza Ghodsi, Atefe Vaezi (2016).** Investigating the relationship between communication and collaboration of nurses with physicians from nurses' point of view in Neyshabur hospitals. *Health, Spirituality and Medical Ethics*, 3(1):2-9.

**15. Alireza Ghodsi and Mahendran Shitan (2016).** Asymptotic Properties of GPH-Estimators of the Memory Parameters of the Fractionally Integrated Separable Spatial ARMA (FISSARMA) Models. *Probability and Mathematical Statistics*, 36(2): 247-265.

**16. Kiana Babaei, Mostafa Khaleghipoor, Seyedeh Masoomeh Saadati, Alireza Ghodsi, Nastran Sadeghi, Najmeh Nikoo. (2020)** The Effect of Fluid Therapy Before Spinal Anesthesia on Prevention of Headache After Cesarean Section: A Clinical Trial. *Cureus*, 12(11): e11772.  
DOI 10.7759/cureus.

**17. Behnam Mahdavi, Toktam Hajar, Alireza Ghodsi, Majid Mohammadhosseini, Mohammad Mehmandost, Elahe Talebi (2021).** Antidiabetic effect of *Sophora pachycarpa* seeds extract in streptozotocin-induced diabetic mice: a statistical evaluation. *Journal of Investigative Medicine*, 0:1-7.  
DOI:10.1136/jim-2021-001818

**18. Atefeh Tabandeh, Alireza Ghodsi (2022).** First-order spatial random coefficient non-negative integer-valued autoregressive (SRCINAR(1,1)) model, *Communications in Statistics - Simulation and Computation*, 30: 1-13.  
DOI: 10.1080/03610918.2022.2083164.

**19. Sara Abdollahi, Mohammad Hadi Hadizadeh Yazdi, Ali Asghar Mowlavi, Sofie Ceberg, Marianne Camille Aznar, Fatemeh Varshoe Tabrizi, Roham Salek, Alireza Ghodsi, -Farideh Jamali (2022).** Surface guided 3DCRT in deep-

inspiration breath-hold for left sided breast cancer radiotherapy: implementation and first clinical experience in Iran. *Reports of Practical Oncology and Radiotherapy*. 27(5): 881-896.  
DOI: 10.5603/RPOR.a2022.0103

**20. Alireza Ghodsi**, Hassan S. Bakouch, Mahendran Shitan (2023). First-order spatial dependent count integer-valued autoregressive (Sp-DCINAR(1,1)) process. *Communication in Statistics- Simulation and Computation*, 8:1-11.  
DOI: 10.1080/03610918.2023.2234681.

**21. Sara Abdollahi**, Mohammad Hadi Hadizadeh Yazdi, Ali Asghar Mowlavi, Sofie Ceberg, Marianne Camille Aznar, Fatemeh Varshoe Tabrizi, Roham Salek, **Alireza Ghodsi** (2023). A dose planning study for cardiac and lung dose sparing techniques in left breast cancer radiotherapy: Can free breathing helical tomotherapy be considered as an alternative for deep inspiration breath hold? *Technical Innovations & Patient Support in Radiation Oncology*. 25: 1-8.  
DOI: 10.1016/j.tipsro.2023.100201

**22. Alireza Ghodsi**, Mahendran Shitan (2023). First-Order Spatial Gegenbauer Autoregressive (SGAR (1, 1)) Model and some of its Properties. *Journal of the Iranian Statistical Society*. (accepted)

#### Proceedings:

- **Alireza Ghodsi** and Mahendran Shitan, *Estimation of the memory parameters of the fractionally integrated separable spatial autoregressive (FISSAR(1,1)) model: A simulation study*. Book of Abstracts of 5<sup>th</sup> Asian Mathematical Conference (AMC2009), PWTC, Kuala Lumpur, Malaysia, 22-26 June, **2009**.
- **Alireza Ghodsi** and Mahendran Shitan, *Performance of the Regression Method and Whittle's Method for Estimating the Memory Parameters of the Fractionally Integrated Separable Spatial Autoregressive (FISSAR(1,1)) Model: A Simulation Study*. Book of Abstracts of Simposium Kebangsaan Sains Matematik ke-17 (SKSM 17), Malacca, Malaysia, December **2009**.
- **Alireza Ghodsi** and Mahendran Shitan, *Fractionally Integrated Non-Separable Spatial Autoregressive (FINSSAR) Model and Some of its Properties*. Book of Abstracts of Seminar Kebangsaan Aplikasi Sains dan Matematik 2010 (SKASM 2010) in conjunction with Simposium Kebangsaan Sains Matematik ke-18 (SKSM 18), Zon Regency Hotel, Johor Bahru, Malaysia, Page 191, 8-10 December, **2010**.
- **Alireza Ghodsi**, Mahendran Shitan and Hassan Bakouch, *A First-Order Spatial Integer-Valued Autoregressive SINAR(1,1) Model*. Book of Abstracts of International Conference on Applied Statistics and Financial Mathematics (ASFM2010), The Hong Kong Polytechnic University, Hong Kong, Page 55, 16-18 December, **2010**.
- Hazel Monica Matias-Peralta, **Alireza Ghodsi**, Mahendran Shitan and Fatimah Md. Yusoff, *Probability models for the distribution of copepods in different coastal ecosystems along the straits of Malacca*. Book of Abstracts of International Conference on Mathematical Biology and Computational Biology 2011 (ICMCB2011), Renaissance Melaka Hotel, Malacca, Malaysia, page 37, 12-14 April, **2011**.
- **Alireza Ghodsi**, Mahendran Shitan and Hassan Bakouch, *First-Order Spatial Integer-Valued Autoregressive SINAR(1,1) Model and Some of its Properties*. Book of Abstracts of 11<sup>th</sup> Iranian Statistical Conference, Iran University of Science & Technology, Tehran, Iran, page 35, 28-30 August **2012**.
- Parvin Shooshinasab, Aynaz Arekhy, Mohamadreza Moeinfard, **Alireza Ghodsi**, *Effective Factors on Women Participation in Mountaineering; Case Study:*

*Binalud Mountains, Neishabur-Iran*. Book of abstracts of 6th IWG world conference on women and sport, Helsinki, Finland, page 88, 12-15 June **2014**.

- 15's Annual Research Congress of Iran's Medical Sciences Students, Shahrood *University of Medical Sciences*, Shahrood, Iran, page 75, 2-5 September **2014**. (Persian)
- 15's Annual Research Congress of Iran's Medical Sciences Students, Shahrood *University of Medical Sciences*, Shahrood, Iran, page 235, 2-5 September **2014**. (Persian)
- 15's Annual Research Congress of Iran's Medical Sciences Students, Shahrood *University of Medical Sciences*, Shahrood, Iran, page 371, 2-5 September **2014**. (Persian)
- Maryam Golkhatmi Bidgoli, Aghdas Saadati, Amin Asghari, Masoomeh Saadati, **Alireza Ghodsi**, Azam Golkhatmi Bidgoli. *Analyzing the relationship between the perception of organizational justice and organizational commitment (Case study: Neyshabur Medical Science College)*. Proceeding of the International Conference on Modern Researches in Management, Economics and Accounting. July **2015**.
- Saadati A, bidgoli M, Saadati M, **Ghodsi A**, salahshour F, Esmaili B, soleymani M. *Survey the desirability of dominant organizational culture in hospitals Neyshabur and Mashhad*. Proceeding of the International Conference on Modern Researches in Management, Economics and Accounting. July **2015** (Persian)
- Proceeding of the 2th International Conference on Management Challenges and Solutions. Shiraz, Iran, page 1-6, February **2015**. (Persian)

**Conferences and Seminars attended:**

- *3<sup>rd</sup> Iranian Statistical Conference* , 2-4 July 1996, Statistical Center of Iran , Tehran, Iran.
- *5<sup>th</sup> Iranian Statistical Conference* , 23- 25 August 1999, The University of Industrial Isfahan, Iran.
- *2<sup>rd</sup> Iranian Seminar on Probability and Stochastic Processes*, 29-30 August 2001, University of Isfahan, Iran.
- *3<sup>rd</sup> Iranian Seminar on Probability and Stochastic Processes*, 23-24 August 2005, University of Birjand, Iran.
- *5<sup>th</sup> Asian Mathematical Conference*, 22-26 June 2009, Kuala Lumpur, Malaysia.
- *Simposium Kebangsaan Sains Matematik ke-17 (SKSM 17)*, 15-17 December 2009, Malacca, Malaysia.
- *SKASM 2010 in Conjunction with SKSM 18*, 8-10 December 2010, Johor Bahru, Malaysia.
- *11<sup>th</sup> Iranian Statistical Conference*, 28-30 August 2012, Iran University of Science & Technology, Tehran, Iran.

**Workshops attended:**

- *Teaching Skills*, 1-2 April 2000, Tarbiat Moallem University of Sabzevar, Iran.
- *Using of Internet and Information Sistems on Teaching*, 8-9 July 2002, Tarbiat Moallem University of Sabzevar, Iran.
- *Speaking and Toffel*, 8 November up to 19 February 2002, Tarbiat Moallem University of Sabzevar, Iran.

- *Internet*, 4-5 January 2002, Tarbiat Moallem University of Sabzevar, Iran.
- *Internet*, 12-15 January 2003, Tarbiat Moallem University of Sabzevar, Iran.
- *Power Point*, 20-21 January 2003, Tarbiat Moallem University of Sabzevar, Iran.
- *Network and Information Banks*, 10-12 January 2004, Tarbiat Moallem University of Sabzevar, Iran.
- *Web Design*, 17-18 January 2004, Tarbiat Moallem University of Sabzevar, Iran.
- *SPSS Software*, 13-14 June 2005, University Tarbiat Moallem University of Sabzevar, Iran.
- *Information Technology*, 3-4 July 2005, Tarbiat Moallem University of Sabzevar, Iran.
- *Related Random Variables*, 7-8 September 2005, Ferdowsi University of Mashhad, Iran.
- *S-Plus Fundamentals and Programming Techniques*, 8-9 January 2008, University Putra Malaysia, Malaysia.
- *LaTex*, 27-28 May 2008, University Putra Malaysia, Malaysia.
- *Lecture Series: Introduction to Kernel Methods*, 30<sup>th</sup>November-4<sup>th</sup>December 2009, University Putra Malaysia, Malaysia.
- *Application of AMOS in Data Analysis*, 24-25 April 2010, University Putra Malaysia, Malaysia.