

# CURRICULUM VITAE

## Khalil Shafie Holighi

### Personal Information

*Name* : Khalil Shafie Holighi

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### Education

B.Sc. Statistics 1988 Shahid Chamran University, Ahvaz Iran  
M.Sc. Statistics 1991 Shahid Beheshti University, Tehran Iran  
Ph.D. Statistics 1998 McGill University, Montreal Canada

### Awards and Honors

First Rank, B.Sc. Statistics program, Shahid Chamran University, Ahvaz, Iran, 1988.

Second Rank, M.Sc. Statistics program, Shahid Behshti University, Tehran, Iran, 1991.

Scholarship from Iranian Ministry of Culture and Higher Education for two years study in  
M.Sc. Statistics program, Shahid Behshti University, Tehran, Iran, 1989-1991.

Scholarship from Iran Ministry of Culture and Higher Education for four years study in  
Ph.D. Statistics program, McGill University, Montreal, Canada, 1993-1997.

Award received from Iranian Ministry of Culture and Higher Education for best thesis  
among Iranian students graduated from Canada, 1998.

## **Work Experience**

1991 - 1993	Lecturer	Department of Statistics Shahid Behshti University, Tehran Iran
1998 - 2006	Assistant Professor	Department of Statistics Shahid Behshti University, Tehran Iran
2006 - 2007	Associate Professor	Department of Statistics Shahid Behshti University, Tehran Iran
2007-	Associate Professor	Applied Statistics and Research Methods University of Northern Colorado

## **Additional Work Experience**

1995 - 1998	Teaching Assistantship	Department of Mathematics and Statistics, McGill University, Montreal Canada
1995 - 1998	Research Assistantship	Department of Mathematics and Statistics, McGill University and McConnell Brain Imaging Centre, Montreal Canada

## **Visiting Positions**

Summer 2000	Department of Mathematics and Statistics, McGill University, Montreal Canada
Summer 2002	Department of Mathematics and Statistics, McGill University, Montreal Canada
2006- 2007	School of Statistics, University of Minnesota, US

### **Prior Research Support**

Investigators	Source	Topic	Years
Shafie K, Noorbaloochi S	Research Deputy of Shahid Beheshti University Tehran, Iran	Bayesian Analysis of Noisy Images	1998-2000
Vahidiasl M, Shafie K	Research Deputy of Shahid Beheshti University Tehran, Iran	Coverage Probability of Areal Sampling	2000-2001
Ganjali M, Shafie K	Research Deputy of Shahid Beheshti University Tehran, Iran	Study of Mixed Responses with Non-monotone Missingness	2001-2002
Ganjali M, Shafie K	Iran Statistics Research Center Tehran, Iran	Study of Non-response in Survey Sampling	2004-2006
Farid Rohani M, Shafie K	Iran Statistics Research Center Tehran, Iran	Bayesian Analysis of Scale Space Random Fields	2005-2006

### **National Projects**

Design of Statistical System for Tourism in Iran, 1999-2001. In this project, data collection methods and statistical analysis of tourism industry in consultation with a group of experts in tourism were designed.

Design of Statistical System for Environment Protection in Iran, 2002-2004. In this project, data collection methods and statistical analysis of all environmental issues, including soil, water, air, waste issues in consultation with a group of experts in environmental sciences were designed.

Implementing Statistical System for Environment Protection in Iran, 2004-2005. The first phase of the design was implemented in this design.

## Courses Taught

### 1. Undergraduate (1992-1993, 1998-2007):

Mathematical Statistics I, Mood and Graybill, and Hogg and Craig.  
Mathematical Statistics II, Mood and Graybill, and Hogg and Craig.  
Methods of Discrete Multivariate Statistical Analysis, Agresti.  
Time Series Analysis, Brockwell and Davis.  
Introduction to Statistics.  
Introductory Statistics for health Sciences.  
Basic practice of Statistics, Moore.

### 2. Graduate (1998-2008)

Statistical Inference I, Cassella and Berger, Bickel and Doksum.  
Statistical Inference II, Cassella and Berger, Bickel and Doksum.  
Advanced Statistical Inference I, Lehmann.  
Advanced Statistical Inference II, Lehmann.  
Inference for Stochastic Processes, Parakasha Rao  
Methods of Multivariate Statistical Analysis, Rencher.  
Statistical Decision Theory, Berger.  
Categorical Data Analysis, Agresti  
Statistical Methods, Gene V Glass and Kenneth D. Hopkins.  
Introduction to Graduate Research, Ary, D. et. al.  
Applied Time Series Analysis, Chatfield.

## **Master Student Supervision**

- Farzaneh Jamee, Linex Unbiasedness in Prediction, Shahid Beheshti University, Tehran, Iran (1999-2000).
- Hamid Ghorbani, Random Sets and Statistical Inference for Boolean Models, Shahid Beheshti University, Tehran, Iran (1999-2000).
- Reza Valizadeh, Characteristics of Random Sets ,Shahid Beheshti University, Tehran, Iran (1999-2000).
- Mohammad Jafari Jozani, Minimax Estimation of Scale Parameter under the Squared Error Loss, Shahid Beheshti University, Tehran, Iran (2000-2001).
- Hamid Sharif, Regression Depth, Shahid Beheshti University, Tehran, Iran (2000-2001).
- Samaneh Ghaderi, Approximation of the Distribution of the Maximum of a Random Field with the Expected Euler Characteristic, Shahid Beheshti University, Tehran, Iran (2000-2001).
- Masoud Kargar, Testing Null Hypotheses in Curved Exponential Families, Shahid Beheshti University, Tehran, Iran (2001-2002)
- Alireza Arabpour, Estimation of the Fractal Dimension of Gaussian Processes, Shahid Beheshti University, Tehran, Iran (2001-2002)
- Razieh Naderkhani, Rotation Space Random Fields with a Mexican Hat Kernel, Shahid Beheshti University, Tehran, Iran (2002-2003).
- Yassaman H. Kashi, Functional Principal Component Analysis for Persian Handwriting, Shahid Beheshti University, Tehran, Iran (2003-2004).
- Mohammad Taherioun, Higher Moments of Euler Characteristic, Shahid Beheshti University, Tehran, Iran (2003-2004).
- Majid Zahedi, Bayesian Analysis of fMRI Data, Shahid Beheshti University, Tehran, Iran (2004-2005).
- Fatemeh Shouhoodi, Fully Bayesian Analysis of fMRI Data, Shahid Beheshti University, Tehran, Iran (2005-2006).
- Mona Shokripour, Hilbert valued Time Series, Shahid Beheshti University, Tehran, Iran (2005-2006).

## **Doctoral Student Supervision**

- M. Khazaei, Regression Models for the Boolean Random Sets, Shahid Beheshti University, Tehran, Iran (2001-2005).
- M. Farid Rouhani, Bayesian Approach to the Scale Space Random Fields, Shahid Beheshti University, Tehran, Iran (2002-2006).

## Publications

- Shafie, K., Noorbaloochi, S. (1995). *Asymmetric unbiased estimation in location families*. Statist. Decisions: 13; 307–314.
- Worsley, KJ, MacDonald, D., Cao, J., Shafie, K. & Evans, AC (1996). *Statistical analysis of cortical surfaces*. NeuroImage: 3; S108.
- Shafie, K., Worsley, K.J., Wolforth, M., Evans, A.C. (1998). *Rotation space: Detecting functional activation by searching over rotated and scaled filters*. NeuroImage: 7; S755.
- Sadeghi, H., Allard, P., Shafie, K., Pierre, A. Mathieu, Sadeghi, S., Prince, F., Ramsay, J. (2000). *Reduction of gait data variability using curve registration*. Gait and Posture: 12; 257-264.
- Ghorbani, H. and Shafie, K. (2001). *Random sets and statistical inference for Boolean models*. Andishe ye Amari: 6; 34-43 (In Persian).
- Jafari Jozani, M., Nematollahi, N., Shafie, K. (2002). *An admissible minimax estimator of a bounded scale-parameter in a subclass of the exponential family under scale-invariant squared-error loss*. Statistics & Probability Letters: 60; 437-444.
- Shafie, K., Sigal, B., Siegmund, D. and Worsley, K. J. (2003). *Rotation space random fields with an application to fMRI data*. The Annals of Statistics: 31; 1732-1771.
- Ganjali, M. and Shafie, K. (2005). *Estimation based on the appropriate choice of the loss function*. JIRS; 4; 87-95.
- Farid Rohani, M., Shafie, K. and Noorbalochi, S. (2006). *A Bayesian signal detection procedure for scale-space random fields*. The Canadian Journal of Statistics: 34 (2) ; 311-325
- Khazaei, M., Shafie, K. (2006). *Regression models for the Boolean random sets*. Journal of Applied Statistics: 33; 557-567.
- Ganjali, M., and Shafie, K. (2006). *A transition model for an ordered cluster of mixed continuous and discrete responses with non-monotone missingness*. Journal of Applied Statistical Science, 15 (3), 331-343
- Farid Rohani, M., Shafie, K.(2008). *A Bayesian approach to parameter estimation of signals in Gaussian random fields*. The Iranina Journal of Statistical Sciences (Farsi) 1 (2), 121-137.

## Presentations

- Bronsert, M and Shafie, K. (2008). ‘Modeling Informative Scheduling in Longitudinal Analysis.’ Conference: Biopharmaceutical Statistics, Fort Collins, Colorado.

- Alkahtani, S. and Shafie K. (2008). 'Linear-Unbiased Filtering of Time Series.', The Joint Statistical Meeting, Denver, Colorado.
- Khazaei, M., Shafie, K. and Ganjali, M. (2008). 'Fitting Regression Models of Propagation Type to the Boolean Random Set.' The Joint Statistical Meeting, Denver, Colorado.
- Shafie K. (2006). 'On Statistical inference on Abstract Spaces.' The 8th Iranian Statistical Conference, Shiraz, Iran.
- Shafie K. (2005). 'On Hilbert  $C^*$ -module-valued random variables.' The 5th Seminar on Probability and Stochastic Processes, Birjand, Iran.
- H. Kashi, Y. and Shafie, K. (2004). 'Personal Handwriting Analysis Using Functional Principal Components.' International conference on the future of Statistical theory, practice and education. Hyderabad, Andhra Pradesh, India.
- Ganjali, M., Shafie, K. (2002). 'A transition model for an ordered cluster of mixed continuous and discrete responses with non-monotone missingness.' Seventeenth International Workshop on Statistical Modeling, Chania.

## Books

- M. Ganjali., Shafie. K. (2002). 'Optimization in Statistics', Translation, in Persian. Tehran, Iran.

## SERVICE

I have reviewed papers for:

Annals of the Institute of Statistical Mathematics.

Journal of Iranian Statistical Society.

Neuroimaging