#### Curriculum Vitae

Name: Mahsa, Surname: Rafiee Alhossaini

Date & Place of Birth: 27/03/1987-Isfahan-Iran

E-mail Address: mhs\_rafiee@yahoo.com

## **Academic degrees**

**Ph.D.:** Biostatistics, Tarbiat Modares University, Tehran, Iran, 2015 – 2021, Cumulative GPA: 18.36 (out of 20). Thesis title: "A multivariate location-scale model for clustered ordinal data and its application in medical data analysis".

**MSc.:** Biostatistics, Isfahan University of Medical Sciences, Isfahan, Iran, 2010-2013, Cumulative GPA: 17.94 (out of 20). Thesis title: "Assessing changes in awareness level about cardiovascular diseases risk factors and its related determinants among Isfahan and suburb's inhabitants, using latent transition analysis: 2004-2007".

**BSc.:** Statistics, Isfahan University, Isfahan, Iran, 2005-2009. Cumulative GPA: 15.47 (out of 20). Final project title: "*Investigating the effect of different nitrogen levels on agronomic characteristics of sunflower*".

**Diploma**: Mathematics. Cumulative GPA:18 (out of 20), 2003-2004.

#### **Honors and Awards**

- 1. **Top student** during Ph.D. education.
- 2. **Scholarship award** by the Ministry of Science, Research and Technology of the Islamic Republic of Iran to carry out part of ongoing Ph.D. research study as a visiting research at the University of Miskolc, Hungary (2018).
- 3. **Second top student** during M.Sc. education.

### **Publications**

#### **Book**

1- "Expert Choice Software Guide", Ajripour, I. & <u>Rafiee Alhossaini, M.</u>, IRAN:Author, 2016. (In Persian)

#### **Journal Publications**

- 1- "Transition in public knowledge of risk factors of cardiovascular disease in an Iranian general population: A latent transition analysis (LTA) on a longitudinal large community-based educational prevention program ", **Alhossaini**, **M. R**., Hassanzadeh, A., Feizi, A., & Sarrafzadegan, N. (2016). *ARYA atherosclerosis*, 12(4), 185.
- 2- "Assessment of longitudinal and cross-sectional effects of age on adult obesity in an Iranian population: results of a large population-based cohort study", **Rafiee Alhossaini**, **M.**, Kazemnejad, A., Zayeri, F., & Sadeghi, M. (2021). Iranian Red Crescent Medical Journal, 23(6). Retrieved from https://ircmj.org/index.php/IRCMJ/article/view/736.
- 3- "Photocount statistics of ultra-weak photon emission from germinating mung bean", Rafieiolhosseini, N., Poplová, M., Sasanpour, P., Rafii-Tabar, H., **Alhossaini, M. R.**, & Cifra, M. (2016). *Journal of Photochemistry and Photobiology B: Biology*, 162, 50-55.
- 4- "Study of the efficacy of therapeutic interventions in growth normalization of children with congenital hypothyroidism detected by neonatal screening ", Feizi, A., Hashemipour, M., Hovsepian, S., Amirkhani, Z., Kelishadi, R., **Rafiee Alhossaini, M.**, & Amini, M. (2011). *Iranian Journal of Endocrinology and Metabolism*, 13(6), 681-689.
- 5- "An application of latent transition analysis in defining socioeconomic and obesity status in adults living in three counties in the central region of Iran", **Alhossaini, M. R.**, Kazemnejad, A., Sadeghi, M., & Sarrafzadegan, N. (2022). *Int J Clin Exp Med*, 15(1), 32-36.

# **Conference Papers**

- 1- "Transition in public knowledge of risk factors of CVD in an Iranian general population: An Application of Latent Transition Analysis (LTA) for evaluating a large community based educational prevention program", **Rafiee Alhossaini**, **M.**, Feizi, A. Hassanzadeh, A. Sarrafzadegan, N., and Ajripour, I., *12th Iranian Statistical Conference*, 25<sup>th</sup> -26<sup>th</sup> October, 2014, Kermanshah, Iran.
- 2- "Photocount statistics of ultra-weak photon emission from germinating mung bean", Rafieiolhosseini, N., Poplová, M., Sasanpour, P., Rafii-Tabar, H., **Alhossaini, M. R.,** & Cifra, M., *1st International Workshop on Ultra-weak photon Emission (UPE) by Biological Systems*, 7th -9th February, 2016, Tehran, Iran.
- 3- "AN APPLICATION OF LATENT CLASS ANALYSIS IN DEFINING AN INDEX FOR SOCIOECONOMIC STATUS", **Rafiee Alhossaini Mahsa**, Kazemnejad Anoshirvan, Szilagyi Roland, Sadeghi Masoumeh, *Tavaszi Szél-Spring Wind Conference 2019*, 3<sup>th</sup> 5<sup>th</sup> May 2019, Debrecen, Hungary. published in conference volume, ISBN 978-615-5586-61-3, available online: http://dosz.hu/dokumentumok/tsz2019\_konferencia.
- 4- "AN APPLICATION OF LATENT TRANSITION ANALYSIS IN DEFINING SOCIOECONOMIC AND OBESITY STATUS IN ADULTS LIVING IN TWO CITIES IN CENTRAL REGION OF IRAN", **Rafiee Alhossaini Mahsa**, Kazemnejad Anoshirvan, Sadeghi

- Masoumeh, Szilagyi Roland, *Miskolci Egyetem Gazdaságtudományi Kar XI. Nemzetközi Konferencia 2019 (International scientific conference) titled "Mérleg és Kihívások"*,17<sup>th</sup> -18<sup>th</sup> October 2019, Lillafüred, Hungary.
- 5- "An application of latent Transition analysis in defining an index for socioeconomic status and assessing its changes over time", **Rafiee Alhossaini Mahsa**, Kazemnejad Anoshirvan, Sadeghi Masoumeh, Szilagyi Roland, *International scientific conference titled "The Challenges of Analyzing Social and Economic Processes in the 21st Century*, 7<sup>th</sup>-9<sup>th</sup> November 2019, Szeged, Hungary.
- 6- "Using Yager Method to ordering and selecting suppliers with certain data", Ajripour, I., Ghazinezhad, P. and **Rafiee Alhossaini, M.**, 11th International Industrial Engineering Conference, 7<sup>th</sup> -8<sup>th</sup> Jan, 2015. (In Persian)
- 7- "Using ELECTRE 1 Technique for supplier selection in Fiber Intermediate Production Company", Ajripour, I. and **Rafiee Alhossaini, M.**, Second National Conference on Industrial Engineering Sustainable Management (IESM'14), 15<sup>th</sup> -16<sup>th</sup> Oct, 2014. (In Persian)
- 8- "An application of Fuzzy TOPSIS method to select appropriate raw materials supplier: A case study in a fiber intermediate production company", Ajripour, I., Davodi, M., and **Rafiee Alhossaini, M.**, 7th International Iranian Operation Research Society Conferences, 14<sup>th</sup> -15<sup>th</sup> May, 2014. (In Persian)
- 9- "An application of analytic hierarchy process (AHP) for selecting the best option to purchase pump", Ajripour, I. and **Rafiee Alhossaini, M.**, 7th International Iranian Operation Research Society Conference, 14<sup>th</sup> -15<sup>th</sup> May, 2014. (In Persian)
- 10- "Emergency department simulation to optimization, reduce waiting times and increase patient throughput, using Simulate 8 software", Ajripour, I. and **Rafiee Alhossaini, M.,** 2nd National Conference on Industrial Engineering and Systems, 25<sup>th</sup> -26<sup>th</sup> Feb, 2014. (In Persian).

## **Programming & Software skills**

**R** programming, **SAS** programming, **Win Bugs** and **JAGS** programming, **SPSS** software, **STATA** software, **Python** programming, MATLAB programming, C++ programming.

## **Job Experiences**

- Researcher, Isfahan Cardiovascular Research Institute (ICRI) (November 2021 till now)
- Teaching "Logistic Regression" (Spring 2019 and Fall 2020) course for MBA international Ph.D. and Master students, University of Miskolc, Miskolc, Hungary.
- Teaching "Statistics and its application in management" (Spring and Fall 2014) –course for Management and Accounting BSc. students, Hasht-Behesht University, Isfahan, Iran
- Teaching "Biostatistics and probabilities" (Fall 2014) –course for medical engineering BSc. students, Islamic Azad University of Najaf-Abad, Najaf-Abad, Iran
- Teaching "Statistics and its application in Accounting" (Spring 2015) –course for Accounting BSc. students, Sepahan Institute of Higher Education, Isfahan, Iran
- Teaching "Sampling methods" (Fall 2012) —workshop on research methods for professional health BSc. students, School of Public Health, Isfahan university of Medical Sciences, Isfahan, Iran.

# Language skills

Persian (Native), English (Advanced), German (Beginner), Hungarian (Beginner)

# **Fields of Interest**

Statistics, Biostatistics, Longitudinal Data Analysis, Generalized Linear Models, Bayesian Methods, Clinical Trials, Survival Data Analysis, Design and Analysis of Experiment, Meta-analysis, Small Area Estimation (SAE) methods, Structural Equation Models (SEM).

### **Symposiums & Workshops**

- 1- "End-note" training workshop, 19 December 2011.
- 2- "Advanced Search Skills" training workshop, 1 September 2012.
- 3- "Bioinformatics analysis using R" training workshop, 23 December 2015.
- 4- "Biological network analysis" training workshop, 23 December 2015.
- 5- "Modern variable selection techniques in high dimensional regression problems" training workshop, 21-23 July 2015.
- 6- "Medical Writing" training workshop, 11 August 2016.
- 7- "Nonparametric Bayes Inferences" training workshop, 28 August 2016.
- 8- "Machin learning and Data mining using Python" training workshop,17 May 2017.
- 9- "Sample size" training workshop, 16 December 2017.
- 10- "Python programming" training workshop, 2 June 2017.
- 11- "Bayesian analysis for longitudinal data with count responses" training workshop.

# References

### Prof. Anoshirvan Kazemnejad

Department of Biostatistics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. Phone: +982182883875, Cell phone: +989121088097, Email: kazem\_an@modares.ac.ir

## Prof. Farid Zayeri

Department of Biostatistics, Shahid Beheshti University of Medical Sciences, Tehran, Iran. Phone: +982122707347, Cell phone: +989125277488, Email: fzayeri@yahoo.com

#### Dr. Roland Szilagyi,

Institute of Economic Theory and Methodology, Faculty of Economic, University of Miskolc, Miskolc, Hungary. Phone: +3646/565-111/11-79, Email: roland.szilagyi@uni-miskolc.hu

# Prof. Ebrahim Hajizadeh

Department of Biostatistics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran. Phone: +982182883810, Cell phone: +989123906714, Email: hajizadeh@modares.ac.ir