



ALLA MAGNIFICA RETTRICE
DELL'UNIVERSITA' DEGLI STUDI DI MILANO

COD. ID: 7068

Il sottoscritto chiede di essere ammesso a partecipare alla selezione pubblica, per titoli ed esami, per il conferimento di un assegno di ricerca presso il Dipartimento di ___Fatemeh Hooti___

Responsabile scientifico: __Prof. Rossini Luca__

[Nome e cognome]

CURRICULUM VITAE

INFORMAZIONI PERSONALI

Cognome	Hooti
Nome	Fatemeh

OCCUPAZIONE ATTUALE

Incarico	Struttura
Lecturer	Ferdowsi University of Mashhad, Iran.
Adjunct Professor	Khayyam University of Mashhad, Iran.

ISTRUZIONE E FORMAZIONE

Titolo	Corso di studi	Università	anno conseguimento titolo
Laurea Magistrale o equivalente			
Specializzazione	1 year	University of Naples Federico II	2023
	1 year	Ferdowsi University of Mashhad	2022
Dottorato Di Ricerca	5 years	Ferdowsi University of Mashhad	2020
Master	2 years	Ferdowsi University of Mashhad	2015
Diploma Di Specializzazione Medica			
Diploma Di Specializzazione Europea			
Altro			



ISCRIZIONE AD ORDINI PROFESSIONALI

PREMI, RICONOSCIMENTI E BORSE DI STUDIO

anno	Descrizione premio
2022	Postdoc position, title Mathematical-Statistical analysis of stochastic process for dynamical of complex systems and their reliability, University of Naples Federico II, Italy
2021-2023	Postdoc position, maintenance, repairable system and warranty models, Ferdowsi University of Mashhad, IRAN

ATTIVITÀ DI FORMAZIONE O DI RICERCA

descrizione dell'attività
<p>I graduated with a Ph.D. in Statistics under the supervision of Prof. Jafar Ahmadi from one of the most prestigious universities in Iran, Ferdowsi University of Mashhad (FUM), in December 2020. Following this, I completed a postdoctoral research project on an extended 2-D warranty plan with a nonrenewing period and a limited number of repairs, again under the supervision of Prof. Ahmadi. I subsequently held a postdoctoral research position at the University of Naples Federico II, which concluded in January 2023. Additionally, I spent six months as a visiting scholar in the Department of Mechanical and Industrial Engineering at the University of Naples Federico II. Upon returning to Iran, I resumed my position as a lecturer at Ferdowsi University of Mashhad. I am interested in doing research and growing my education.</p> <p>Before starting my PhD, I engaged in research and collaboration within the Department of Mathematics at FUM, where I also completed my bachelor's and master's degrees. My doctoral thesis, titled "A study on frailty models and using them in estimation and optimization" was successfully defended with an excellent degree at FUM under the supervision of Prof. Jafar Ahmadi and Dr. Maria Longobardi. My research focused on topic of reliability engineering, repairable systems, optimization, warranty models for engineering systems and maintenance models.</p> <p>My Ph.D. research culminated in the development of a new warranty plan based on a limited number of repairs within the warranty period. Also, I introduced a generalized proportional reversed hazard rate frailty model and used it to analysis of Lung Cancer Data and estimated and deduced its parameters. Moreover, I researched the use of frailty models in reliability and considered repairable systems in heterogeneous populations. Then, I studied optimal regression designs. Following my Ph.D., I completed a postdoctoral project at the FUM, titled "An Extended Warranty Plan Based on a Renewing Warranty Plan and a Limited Number of Repairs,". Then, I undertook a postdoctoral research position at the University of Naples Federico II from February 2022 to January 2023. My research contributions in this field</p>



include papers such as “**Optimal Extended Warranty Length with Limited Number of Repairs in the Warranty Period,**” published in *Reliability Engineering and System Safety*, and “**A New Warranty Plan Based on a Combination of Renewing Warranty and a Limited Number of Repair Policies,**” accepted by the *International Journal of Production Research*. Furthermore, my paper titled “D-optimal Design for Repairable Systems in Heterogeneous Populations” is currently under review. I have complete knowledge of using **R software** and I have always used it in conducting my research, and I have even held **training courses for this software** at Ferdowsi University of Mashhad for students. I am also fully proficient in **SPSS** and **Maple** software. So, according to the call and the description of the current position at the **University of Milan**, I am suitable for this situation because **I have sufficient knowledge of working with R software and experience in using it in optimization of cost and risk models**. In addition, if needed, I can hold training courses for all these software in your university or lab for the students and those interested in learning them. I have participated in **Machine Learning** and **Data Science** courses and I am familiar with these topics to some extent, and due to the growth of these subjects, I am still interested in learning more in these fields. **Additionally, I have taught courses at FUM, including Mathematical Statistics and R software, as well as Statistics and Probability in Engineering, Economics, Veterinary Science, Accounting, and Geology. So, I can teach these courses and other courses such as reliability and availability theory for engineering systems in English.**

With this background, I would appreciate it if you allow me to join your research team at the University of Milan. So, I can follow my research and career goals. continue my research information with you. I want you to know that working under your support and guidance will enhance my research knowledge and be very valuable to me. Thank you for considering my application.

TEACHING & TEACHER ASSISTANT

■ **Teaching:**

1. Statistics and Probability in Engineering, (Bachelor in Computer, Mechanical and Industrial Engineering), 2023-2024, Ferdowsi University of Mashhad and Khayyam University of Mashhad, Mashhad, Iran.
2. Statistics in Economics (I and II), (Bachelor in Economics), 2023-2024, Ferdowsi University of Mashhad, Mashhad, Iran.
3. Applied Statistics, (Master of Science in Accounting), 2023-2024, Khayyam University of Mashhad, Mashhad, Iran.
4. Statistics and its Application in Management, (Bachelor in Accounting), 2018, Khayyam University of Mashhad, Mashhad, Iran.
5. Statistics and Its Applications in Management (I and II), (Bachelor in Management), 2023-2024, Khayyam University of Mashhad, Mashhad, Iran.
6. Statistics and its Applications, (Bachelor in Accounting), 2023-2024, Khayyam University of Mashhad, Mashhad, Iran.
7. Mathematical Statistics II, (Bachelor in Statistics), 2020, Ferdowsi University of Mashhad, Mashhad, Iran.
8. Biostatistics, (Bachelor in Healthy Food and Aquatic), 2021, Ferdowsi University of Mashhad, Mashhad, Iran.



9. Basic Statistics, (Bachelor in Geology), 2019-2021, Ferdowsi University of Mashhad, Mashhad, Iran.
10. Statistics and its Application in Management, (Bachelor in Accounting), 2018, Khayyam University of Mashhad, Mashhad, Iran.

▪ **Teacher assistant:**

1. R Software, 2017—2020, Ferdowsi University of Mashhad, Mashhad, Iran.
2. Basic Probability and Statistics, 2016-2021, Ferdowsi University of Mashhad, Mashhad, Iran.
3. Probability, 2016-2020, Ferdowsi University of Mashhad, Mashhad, Iran.
4. Mathematical Statistics I, 2016-2019, Ferdowsi University of Mashhad, Mashhad, Iran.
5. Stochastic Process, 2018, Ferdowsi University of Mashhad, Mashhad, Iran.
6. Engineering Probability and Statistics, 2012, Ferdowsi University of Mashhad, Mashhad, Iran.

ATTIVITÀ PROGETTUALE

Anno	Progetto
2020	Research assistant under the supervision of Prof. Jafar Ahmadi

TITOLARITÀ DI BREVETTI

CONGRESSI, CONVEGNI E SEMINARI

Data	Titolo	Sede
August 2022	The 24th International Conference on Computational Statistics, Bologna, Italy.	http://www.compstat2022.org/
May 2022	14th International Conference on Ordered Statistical Data (OSD), Vietri sul Mare, Italy	https://www.osd2022.unina.it/
May 2021	The 7th Seminar on Reliability Theory and its Applications, University of Birjand, Iran.	
October 2020	The 4th Seminar on Information Theory and its Application, University of Isfahan, Iran.	
August 2020	The 6th Seminar on Reliability Theory and its Applications, University of Mazandaran, Iran.	



2018	the 13th International Conference on Ordered Statistical Data, Cadiz University, Spain.	
2018	The 4th Seminar on Reliability Theory and its Applications	
2017	The 3rd Seminar on Reliability Theory and its Applications	
2016	<i>The 2nd Seminar on Reliability Theory and its Applications</i>	
2015	The 2nd Workshop on Information Measures and Their Applications	
2019	Workshop on Data Science	
2018	Winter School on Statistical Machine Learning	
2016	Workshop on Simulation based on Bootstrap and Mont Carlo Using the R Software	

PUBBLICAZIONI

Articoli su riviste
Rajinia, Kh., Razmkhah, M. and Hooti, F. (2024) An imperfect maintenance policy for gamma deteriorating systems. Under Review.
Hooti, F. and Ahmadi, J. (2024) D-optimal design for repairable systems in heterogeneous populations. Under Review.
Hooti, F. and Ahmadi, J. and Longobardi, M. (2024) A new warranty plan based on a combination of renewing warranty and limited number of repairs policies. (Accepted with minor revised), <i>International Journal of Production Research</i> .
Hooti, F. and Ahmadi, J. and Longobardi, M. (2020) Optimal extended warranty length with limited number of repairs in the warranty period. <i>Reliability Engineering and System Safety</i> , 203, 107111, DOI: 10.1016/j.ress.2020.107111 .
Hooti, F., Ahmadi, J. and Balakrishnan, N. (2020). Stochastic comparisons of general proportional mean past lifetime frailty model. <i>Sankhya A</i> , DOI: 10.1007/s13171-020-00222-3 .
Hooti, F., Ahmadi, J., (2018). <u>General Proportional Reversed Hazard Rate Frailty Model and Its</u>



Applications in the Analysis of Lung Cancer Data. *Journal of Statistical Sciences*, **13**, 405--425 (in Persian).

Hooti, F., Ahmadi, J., (2016). Quantile Dynamic Cumulative Residual Entropy and Characterizations of Uniform, Exponential, and Pareto Distributions. *Journal of Statistical Sciences*, **10**, 67--80 (in Persian).

Atti di convegni

Hooti, F. and Ahmadi, J., Longobardi, M., Stochastic Comparisons of General Proportional Mean Past Lifetime Frailty Model, *The 24th International Conference on Computational Statistics*, 23 – 26 August 2022, Bologna, Italy.

Hooti, F. and Ahmadi, J., Longobardi, M., General Proportional Mean Residual and Past Lifetime Frailty Models, *14th International Conference on Ordered Statistical Data (OSD)*, 24 – 27 May 2022, Vietri sul Mare, Italy.

Hooti, F. and Ahmadi, J., Optimal warranty length for a repairable system with frailty random variable. *The 7th Seminar on Reliability Theory and its Applications*, pages 38—48, May 19—20, 2021, University of Birjand, Iran.

Hooti, F. and Ahmadi, J., Bayesian D-optimal designs based on the expected Shannon information for repairable systems. *The 4th Seminar on Information Theory and its Application*, pages 34—38, October 14—15, 2020, University of Isfahan, Iran.

Hooti, F. and Ahmadi, J., Optimal warranty length for a repairable system with frailty random variable. *The 6th Seminar on Reliability Theory and its Applications*, pages 112—130, August 11—12, 2020, University of Mazandaran, Iran.

Ahmadi, J., Hooti, F. and Balakrishnan, N., Stochastic orderings among general proportional mean past lifetime frailty models, in abstract book of the 13th International Conference on Ordered Statistical Data, 2018, Cadiz University, Spain.

Hooti, F., Ahmadi, J., Some results on proportional mean past lifetime frailty model, *The 4th Seminar on Reliability Theory and its Applications*, pages 90--96, April. 25 – 26, 2018, Shiraz University, Iran.

Hooti, F., Ahmadi, J., Frailty models, and their properties, *The 3rd Seminar on Reliability Theory and its Applications*, pages 68--74, May. 16 – 17, 2017, Ferdowsi University of Mashhad, Iran.

Hooti, F., Ahmadi, J., Quantile-based generalized dynamic cumulative past entropy, in abstract book of the 3rd Workshop on Information Measures and Their Applications, February. 28, 2018, Ferdowsi University of Mashhad, Iran.

Hooti, F., Ahmadi, J., Quantile-based dynamic cumulative entropy, in abstract book of the 2nd Workshop on Information Measures and their Applications, 2015-01-28, Ferdowsi University of Mashhad, Iran

Hooti, F., Fashandi, M., Ahmadi, J., Quantile Dynamic Cumulative Residual Entropy, *The 12th Iranian Statistical Conference*, pages 104--110, August. 25-27, 2014, Razi University, Kermanshah, Iran.

ALTRE INFORMAZIONI

COMPUTER SKILLS



- Statistical software (R, Maple, Matlab, SPSS).
- Writing Environment (TexMaker, WinEdit, and Microsoft Office (Word, Excel, PowerPoint)).

ACTIVITIES & COLLABORATIONS

- Collaborate with the 1st *Seminar on* Evidential Inference as executive staff, 2019, 12, June, Ferdowsi University of Mashhad, Mashhad, Iran.
- Collaborate with the 5th *Seminar on* Copula Theory and its Applications as executive staff, 30 –31, January 2019, Ferdowsi University of Mashhad, Mashhad, Iran.
- Collaborate with the 3rd *Seminar on* Reliability Theory and its Applications as executive staff, 16 – 17, May 2017, Ferdowsi University of Mashhad, Mashhad, Iran.
- Collaborate with “Ordered and Spatial Data Center Excellent” (OSDCE), 2016, Ferdowsi University of Mashhad, Mashhad, Iran.

HONORS & AWARDS

- Ranked the 3rd among Ph.D. students of statistics, Ferdowsi University of Mashhad, 2016.
- Ranked the 1st among comprehensive exam Ph.D. students of statistics, Ferdowsi University of Mashhad, 2016.
- Ranked among the top 1% of participants in the national Ph.D. entrance examination for Iranian universities, in 2015.
- Ranked among the top 10% of B.Sc. statistics graduates, Ferdowsi University of Mashhad, 2012.

Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del DPR n. 445/2000.

Il presente curriculum, non contiene dati sensibili e dati giudiziari di cui all’art. 4, comma 1, lettere d) ed e) del D.Lgs. 30.6.2003 n. 196.

RICORDIAMO che i curricula **SARANNO RESI PUBBLICI** sul sito di Ateneo e pertanto si prega di non inserire dati sensibili e personali. Il presente modello è già precostruito per soddisfare la necessità di pubblicazione senza dati sensibili.

Si prega pertanto di **NON FIRMARE** il presente modello.

Luogo e data: ____Mashhad, IRAN____, ____14/01/2025_____