# Abdel-Razzaq Mugdadi

Department of Mathematics and Statistics Jordan University of Science and Technology Irbid - Jordan aamugdadi@just.edu.jo

# **Education**

Aug. 94 to Aug. 99 Ph.D. of Mathematical Sciences- Area Statistics

Master of Applied Probability and Statistics

Northern Illinois University - U. S. A.

Sept. 89 to Dec. 91 Master of Statistics

Yarmouk University – Jordan

Sept. 85 to June 89 Bachelor of Statistics

Minor: Computer Science Yarmouk University - Jordan

# **Professional Experience**

Aug. 2016- Present On leave from JUST

Professor and

Mathematics and Natural Sciences Coordinator Abu Dhabi Men's and Women's campuses

Higher Colleges of Technology

**United Arab Emirates** 

Aug. 2014 – Present Professor

Department of Mathematics and Statistics Jordan University of Science and Technology

Irbid. Jordan

Sept. 2010-Aug. 2014 Associate Professor

Department of Mathematics and Statistics Jordan University of Science and Technology

Irbid. Jordan

Sept. 2011-Aug. 2013 Acting Chairman

Department of Mathematics and Statistics Jordan University of Science and Technology

Irbid. Jordan

June 2005- Sept. 2010	Associate Professor, Department of Mathematics, Southern Illinois University Carbondale, Carbondale, Illinois, U. S. A.
Aug. 2006-July 2007	Faculty Associate Department of Mathematics The American University of Sharjah Sharjah, United Arab Emirates
Aug. 2000 – June 2005	Assistant Professor, Department of Mathematics, Southern Illinois University, Carbondale, Illinois, U. S. A.
Sept. 1999 - Aug. 2000	Visiting Assistant Professor, Department of Mathematics and Statistics, University of Minnesota-Duluth, Duluth, Minnesota, U. S. A.
Jan. 1998 - Aug. 1999	Graduate Assistant, Division of Statistics and Department of Mathematical Science, Northern Illinois University, DeKalb, Illinois, U.S.A.
Sept. 1997 - Dec. 1997	Researcher and data analyst, DeKalb Genetics Corporation, DeKalb, Illinois, U.S.A.
Aug. 1994 - Aug. 1997	Graduate Assistant, Division of Statistics Northern Illinois University, DeKalb, Illinois, U.S.A.
Sept. 1992 - July 1993	Researcher and Data analyst, Department of Biological Sciences Yarmouk University – Jordan
Sept. 1990 - Jan. 1992	Graduate Assistant, Department of Statistics Yarmouk University – Jordan

# **Teaching Experience**

Taught the following courses at the Higher Colleges of Technology

- 1- Statistics for Engineering
- 2- Statistical Mathematics
- 3- Pre-calculus

Taught the following courses at Jordan University of Science and Technology

- 1- Pre-calculus
- 2- Calculus for Biological Sciences students
- 3- Elements of Statistics
- 4- Probability and Statistics for Computer Science Students
- 5- Probability and Statistics for Engineering Students
- 6- Probability Theory
- 7- Mathematical Statistics
- 8- Statistical Inference
- 9- Statistical Methods (1)
- 10- Advanced Biostatistics

Taught the following courses at Southern Illinois University Carbondale:

- 1- Time Series for Actuarial Science
- 2- Applied Multivariate Analysis
- 3- Density Estimation
- 4- Statistical Theory
- 5- Applied Regression Analysis and Experimental Design
- 6- Applied Nonparametric Statistics
- 7- Sampling
- 8- Reliability and Life Testing
- 9- Mathematical Statistics in Engineering and the Sciences
- 10- Introduction to Statistics
- 11- College Algebra

Taught the following courses at the American University of Sharjah

- 1- Introduction to Statistics for Engineering and Natural Sciences
- 2- Introduction to Statistics for Social Sciences
- 3- Calculus I

Taught the following courses at University of Minnesota – Duluth

- 1- Introduction to Probability and Statistics
- 2- Statistical Methods
- 3- Finite Mathematics and Introduction to Calculus

## **Graduate Students:**

- I- Supervise the following Ph.D. students at Southern Illinois University:
  - 1- Amanuel Teweldemedhin
  - 2- Haneef Anver
  - II- Supervise the following master students at Southern Illinois University Carbondale:
  - 1- Emmie Munthali
  - 2- Sherif El Sadat
  - 3- Ghideon Ghebregiorgis
  - 4- Abdelmounaim Lahrech
  - 5- Min A
  - 6- Jennifer Jeter
- III- Supervise the following master student at Jordan University of Science and Technology:
  - 1- Rawan Bani Melhem
  - 2- Ruqayyah Sani
  - 3- Abdullahi Yusuf (Co-advisor)
  - 4- Mustafa Mohamad (Co-advisor)
  - 5- Badamasi Meachael (Co-advisor)
- V- Master's and Ph.D. Committees

Served on the following committees at Southern Illinois University:

- 4 Ph.D. Students from Department of Mathematics
- 6 Ph.D. Students from the Economics Department
- 5 Ph.D. Students from the College of Engineering
- 1 Ph.D. Student from Department of Chemistry and Biochemistry
- 1 Ph.D. Student from Department of Physics
- 1 Ph.D. student from the school of Work force Education
- 14 Master's Students from the Department of Mathematics

Served on the following master students committees in Jordan:

7 master students at Jordan University of Science and Technology

7 master students at Yarmouk University

1 master student at University of Jordan

## **Publications:**

- 1- The weighted Hellinger distance in the multivariate kernel density estimation, with H. Anver. *South African Statistical Journal*. (2016), 50, 2, 221-236
- 2- The beta generalized linear exponential distribution, with M. Shakhatreh and A. Yusuf. *Statistics*. (2016). 50, 6, 1346-1362
- 3- On the Moments of Stochastic Annuities, with I. Ahmad. *International Journal of Pure and Applied Mathematics*. (2014), 94, 4, 515-524

- 4- On the exact and the approximate mean integrated square error for the kernel distribution function estimator, with R. Bani Melhem. *Journal of Mathematics, Statistics and Operation Reseach.* (2014), 2, 2. 13-17
- 5- Two Nonparametric Estimators of the Mean Residual Life, with A. Teweldemedhin. *REVSTAT-Statistical Journal*. (2013), 11, 3, 301-315.
- 6- Application of Fractional Moments for Comparing Random Variables with Varying Probability Distributions, with Al Shami, Nigmatullin and Osokin. *Application and Applied Mathematics: An International Journal.* (2013), 8, 2, 366-390
- 7- The Weighted Hellinger Distance for Kernel Distribution Estimator of Function of Observations. Journal of Modern Applied Statistical Methods (2012), 11,1, 268-273
- 8- Higher order equilibrium life distributions, with I. Ahmad. *IEEE transactions on Reliability*, (2010), 59,1,66-73
- 9- Classes of Statistics for testing exponentiality versus IFR or NBUE alternatives, with A. Ahmad. Calcutta Statistical Association Bulletin, (2010), 62, 245-246, 17-29
- 10- A simulation study for the bandwidth selection in the kernel density estimation based on the exact and the asymptotic MISE, with J. Jeter. Pakistan Journal of Statistics, (2010), 26 (1), 239-265.
- 11- Bayes estimation of the power hazard function, with Min, A, Journal of Interdisciplinary Mathematics, (2009), 12,5,675-689
- 12- Weighted Hellinger Distance as an error criterion bandwidth selection in kernel estimation, with I. Ahmad, *Journal of Nonparametric Statistics*, (2006), 18, 2, 215-226.
- 13- On Simulating Multivariate Non-Normal Distributions using the generalized lambda distribution, with T. Headrick. *Computational Statistics and Data Analysis*, (2006), 50, 11, 3343-3353.
- 14- The kernel distribution estimator of functions of random variables, with G. Ghebregiorgis, *Journal of Nonparametric Statistics*, (2005), 17, 2, 807-818.
- 15- Moments inequalities derived from comparing life with its equilibrium form, with I. Ahmad, *Journal of Statistical Planning and Inference*, (2005), 134, 2, 303-317.
- 16- The least squares type estimation of the parameters in the power hazard function. *Applied Mathematics and Computation*, (2005), 169, 2, 737-748.
- 17- Bounds of Moment generating functions of some life distributions, with I. Ahmad, *Statistical Papers*, (2005), 46,4, 575-585
- 18- Bandwidth selection for the function of observations Using Hellinger Distance. *Journal of Applied Statistical Science*, (2004), 13,3, 231-240
- 19- Further Moments inequalities of Life distributions with hypothesis testing Applications: The IFRA, NBUC and DMRL Classes, with I. Ahmad, *Journal of Statistical Planning and Inference*, (2004), 120,1-2,1-12.
- 20- A Bandwidth Selection for Kernel Density Estimation of Functions of Random Variables, with I. Ahmad, *Computational Statistics and Data Analysis*, (2004), 47,1, 49-62.

- 21- The exponential kernel in density estimation, with A. Lahrech, *Far East Journal of Theoretical Statistics*, (2004), 14,1, 1-14.
- 22- Testing Normality Using the Kernel Methods, with I. Ahmad, *Journal of Nonparametric Statistics*, (2003), 15,3, 273-288.
- 23- Relative efficiency in kernel estimation of the distribution function, with E. Munthali, *Journal of Statistical Research*, (2003). 37, 2,203-218.
- 24- Analysis of the Kernel Density Estimation of Functions of Random Variables, with I. Ahmad, *Journal of Nonparametric Statistics*, (2003),15,4-5, 579-605.
- 25- A goodness of Fit Approach to Major Life Testing Problems, with I. Ahmad and I. Alwasel, *International Journal of Reliability and Applications*, (2001) 2,2 81-97.

#### **Conferences:**

- 1- The 18<sup>th</sup> International Conference on Mathematical, Statistical and Computational Sciences, Paris, France. May 16-17, 2016
- 2- The 17<sup>th</sup> International Conference on Mathematical Sciences and Statistics, Venice, Italy. April 13-14, 2015
- 3- International Conference on Applied Statistics, Khon Kaen, Thailand, May 21-24, 2014
- 4- 2013 WNAR Conference. Los Angeles, CA. U.S.A., June 16-19, 2013
- 5- International Conference on Mathematics and Statistics, Memphis, TN. U.S.A. May 15-18, 2012
- 6- The 5<sup>th</sup> Annual International Conference on Mathematics, Statistics and Mathematics Education. Athens, Greece, June 13-16, 2011
- 7- The 2009 Canadian Mathematical Society winter meeting (invited). Windsor, Ontario, Canada, December 5-7, 2009.
- 8- The fifth UAE Math-Day conference. Sharjah, United Arab Emirates, April 28-29, 2007.
- 9- The Sixth Annual Hawaii International Conference on Statistics, Mathematics and Related Fields. Honolulu, HA, January 16-19, 2007.
- 10-The Indian Statistical Association meeting (invited). Athens, GA, May 14-16, 2004.
- 11-The American Statistical Meeting. San Francisco, CA, August 3-7, 2003
- 12-The American Statistical Meeting. New York, NY August 11-15, 2002
- 13-The American Statistical Meeting. Atlanta, GA, August 5-9, 2001
- 14-The 5th Great Lakes Statistical Conferences. Kalamazoo, MI, October 21-23, 1998.
- 15-International Conference in Reliability and survival Analysis. DeKalb, IL, May 21-24, 1998.
- **16-**Workshop on Longitudinal Data Analysis. DeKalb, IL, November 6-7, 1997.

17-The First DeKalb Symposium on Statistical Science. DeKalb, IL, October 24-27, 1996.

#### **Committees and services:**

Services at Higher Colleges of Technology

- 1- I served as a chair for the exam irregularity committee at Abu Dhabi Men's College for the academic year 2016-2107
- 2- A member of the interview panel for at least 30 candidates for a faculty position.
- 3- Mathematics program committee
- 4- Mathematics and Natural science Curriculum committee

I served in the following committees at Jordan University of Science and Technology

- 1- One of three committee members committee appointed from the deans council at the university to change the grading system
- 2- Director of graduate program committee at the Department of Mathematics and Statistics
- 3- Graduate program committee at both the department and the college levels
- 4- Director of the research committee at the Department of Mathematics and Statistics
- 5- Chairman and member of several promotion committees at both the department and the college levels
- 6- Several hiring committees at the department and at the college levels

I served at the following committees at Southern Illinois University Carbondale

- 1- Graduate Program Committee
- 2- Undergraduate Program Committee
- 3- Undergraduate Advisor
- 4- Tenure and Promotion Committee
- 5- Mathematics Field Day Committee

## **Professional Activities:**

- 1- Book Review: Statistics: Concept and Methods by Ditlev Monrad and William Stout
- 2- Promotion: Served as an external member for review promotion at Babel University Iraq.
- 2- Served as a referee for the following journals:
  - a. Journal of Nonparametric Statistics

- b. Communication in Statistics, Simulation and Computation
- c. Communication in Statistics, Theory and Methods
- d. Journal of Statistical Planning and Inference
- e. Journal of Statistical Computation and Simulation
- f. Annals of Statistics
- h. IEEE transactions on Reliability
- i Computational Statistics and Data Analysis
- j. Journal of Applied Statistics
- k. Statistical Papers
- 1. Hacettepe Journal of Mathematics and Statistics.
- m. Pakistan Journal of Statistics
- n. Jordan Journal of Mathematics and Statistics
- o. Journal of Statistical Distributions and Applications

## **Statistics and Mathematics Software:**

S-Plus, SAS, Minitab, Maple, Excel and SPSS.

#### **Awards**

Dissertation Completion Award The Graduate School, Northern Illinois University, August 1998

Citizenship: U.S.A. and Jordan

## References

- 1- Professor Ibrahim Ahmad Department of Statistics Oklahoma State University Stillwater, OK 74078 <a href="mailto:iahmad@okstate.edu">iahmad@okstate.edu</a> 1-405-744-5684
- 2- Professor David Olive
  Department of Mathematical Sciences
  Southern Illinois University
  Carbondale, IL 62901
  dolive@siu.edu
  1-618-453-6566
- 3- Professor Qutaibah Khatatbeh
  Dean of College of Arts and Science
  Department of Mathematics and Statistics
  Jordan University of Science and Technology
  Irbid, Jordan
  qutaibeh@just.edu.jo

962-777978466

4- Professor Mahmoud Alrefaei
Vice dean of college of graduate study
Department of Mathematics and Statistics
Jordan University of Science and Technology
Irbid, Jordan
<a href="mailto:alrefaei@just.edu.jo">alrefaei@just.edu.jo</a>
962-795512362