



Raed A. Alzghool
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Personal Information

Academic Rank	Assistant professor
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Telephone	+962 77 7748183
Date of Birth	01-08-1973
Nationality	Jordanian
Marital status	Married
Address	Department of Mathematics, Faculty of Science, Al-Balqa' Applied University, Al-Salt 19117, Jordan

Academic Qualification:

Degree	University / Country	Year
Ph. D.	University of Wollongong / Australia	2008
M. Sc.	Yarmouk University / Jordan	1998
B. Sc.	Yarmouk University / Jordan	1995

- **PhD** Degree in Statistics, School of Mathematics and Applied Statistics

Thesis Title: “Estimation for State Space Models: Quasi-likelihood and Asymptotic Quasi-likelihood Approaches”.

- **Masters** Degree – Majoring in Mathematical Statistics

Thesis Title: “Bayes Estimators of Availability of Systems”.

Employment History:

Sep. 2011 - present	Head of Department of Mathematics Faculty of Science, Al-Balqa’ Applied University, Jordan
Sep. 2008 –Sep.2011	Assistant Professor Department of Applied Science, Prince Abdullah Bin Ghazi Faculty of Science and IT, Al-Balqa’ Applied University, Jordan
Mar. 2004 - Sep. 2008	part time Lecturer School of Mathematics and Applied Statistics, University of Wollongong, Australia
Mar. 2004 - Sep. 2008	part time Lecturer International Institute of Business and Information Technology, University of Ballarat at IIBIT (Sydney) Australia
Mar. 1999 -Aug. 2003	Full Time Lecturer Princess Rahma University College, Al-Balqa’ Applied University, Jordan
Mar. 1998 - Mar. 1999	Full Time Lecturer Intermediate college, Amman, Jordan
Sep. 1996 - Mar. 1998	Part Time Lecturer Yarmouk university, Irbid, Jordan

Research Interest:

- The quasi-likelihood method and its applications.
- Time series analysis and its applications in finance.
- The theoretic properties of asymptotic quasi-likelihood method.
- Bayes method.

Academic Honors and Grants

- A scholarship from Al-Balqa' Applied University to get the Ph. D. degree in Statistics from the University of Wollongong, Australia (2004-2008).
- Best research Award in the seventh annual J.B. Douglas Postgraduate Awards event held on 29th November 2006 at Macquarie University, Australia.
- Certificate of Merit (Student) for the 2007 International Conference of Computational Statistics and Data Engineering. London.

Membership

- Islamic Countries Society of Statistical Sciences.
- Union of Arab Statisticians

Publications

- (1) **R. Alzghool**, Estimation for Stochastic Volatility Model: Quasi-likelihood Approach. *Proceedings of the 12th Islamic Countries Conference on Statistical Sciences (ICCS-12)*, Volume 23. The Islamic Countries Society of Statistical Sciences, Doha: Qatar, pp. 531-540, 2012.
- (2) **R. Alzghool** and Y.-X. Lin, Initial Values in Estimation Procedures for State Space Models (SSMs). *Proceedings of the World Congress on Engineering 2011, V I WCE 2011*, July 6 - 8, London, U.K, pp. 307-313, 2011.
- (3) **R. Alzghool** and Y.-X. Lin, and S. X., Chen, Asymptotic Quasi-likelihood Based on Kernel Smoothing for Multivariate Heteroskedastic Models with Correlation, *American Journal of Mathematical and Management Sciences* Volume 30, Issue 1&2, Pages 147-177, 2010.
- (4) **R. Alzghool** and Y.-X. Lin, Estimation for State-Space Models: Quasi-likelihood Approach, *Proceedings of the Tenth Islamic Countries Conference on Statistical Sciences (ICCS-X)*, Volume I. The Islamic Countries Society of Statistical Sciences, Lahore: Pakistan, pp. 409-423, 2010.

- (5) **R. Alzghool** and Y.-X. Lin, Parameters Estimation for SSMs: QL and AQL Approaches, *IAENG International Journal of Applied Mathematics*, **38**, pp. 34-43, 2008.
- (6) **R. Alzghool** and Y.-X. Lin, Asymptotic Quasi-likelihood Based on Kernel Smoothing for Nonlinear and Non-Gaussian State-Space Models, *Lecture Notes in Engineering and Computer Science, ICCSDE*, London, UK, pp. 926-932, 2007.
- (7) **R. Alzghool** and Y-X. Lin (2005). Quasi-likelihood Approach for the Estimation of State-Space Models. *Proceedings of the 2004 Workshop on Research Methods: Statistics and Finance*. pp. 95-106. Wollongong: University of Wollongong, 2005.

Conferences and Workshops Attended

- “Asymptotic Quasi-likelihood Based on Kernel Smoothing for Multivariate Heteroskedastic Models with Correlation”. Presented in *Australian Postgraduate Workshop on Stochastic Processes and Modeling*, University of New South Wales, Sydney, Australia, February, 11-14, 2007.
- “Estimation for State-Space Models: Quasi-likelihood Approach” Presented in *Australian Postgraduate Workshop on Stochastic Processes and Modeling, University of Melbourne*, Melbourne, Australia, February, 13-15, 2006.
- “Asymptotic Quasi-likelihood Based on Kernel Smoothing for Multivariate Heteroskedastic Models with Correlation”. Presented in *Australian statistical conference / New Zealand Statistical Association Conference*, Auckland, New Zealand, July, 3-6, 2006.
- “Quasi-likelihood Approach for the Estimation of State-Space Models.” Presented in *Workshop on Research Methods: Statistics and Finance*. University of Wollongong, Wollongong, Australia, December, 2005.
- “Asymptotic Quasi-likelihood Based on Kernel Smoothing for Nonlinear and Non-Gaussian State-Space Models”. Presented in *the International Conference of Computational Statistics and Data Engineering*, London, U.K, July 2 - 4, 2007

Courses Taught:

- 1. Introductory Statistics**
- 2. Statistics for Business and Economics Students**
- 3. Probability and Statistics**
- 4. Applied Probability**
- 5. Mathematical Statistics**
- 6. Statistical Techniques**
- 7. Financial Mathematics**
- 8. Operation Research**
- 9. Calculus**

Computer skills

OS:	Windows
CAS:	SPSS, MINTAB, JMP, R, S+ Mathematica
Programming:	C++, Fortran
Text Processing:	Latex, Word

References

<p>Dr. Yan-Xia Lin Associate Professor (Supervisor)</p> <p>School of Mathematics and Applied Statistics University of Wollongong, Australia.</p> <p>Ph: (+612) 4221 4336</p> <p>e-mail: yanxia_lin@uow.edu.au</p>	<p>Dr. Chandra Gulati Senior Lecturer</p> <p>School of Mathematics and Applied Statistics University of Wollongong, Australia.</p> <p>Ph: (+612) 4221 3836</p> <p>e-mail: chandra_gulati@uow.edu.au</p>
<p>Dr. Zaid M. Odibat Professor</p> <p>Department of Applied Science, Prince Abdullah Bin Ghazi Faculty of Science and IT, Al-Balqa' Applied University, Al-Salt 19117, Jordan</p> <p>Ph: (+962) 79 6669951</p> <p>e-mail: odibat@bau.edu.jo</p>	<p>Dr. Omar Edous Professor</p> <p>Department of Statistics Yarmok University, Jordan</p> <p>Ph: (+962) 77 7166302</p> <p>e-mail: omarm@yu.edu.jo</p>