



Rahim Alhamzawi

Professor of Statistics
Statistics Department
College of Administration and Economics
University of Al-Qadisiyah
Al Dewania
Iraq

Phone: 009647809974280
Fax:
Office: Computer Center
Email: rahim.alhamzawi@qu.edu.iq
Homepage: [here](#)

Education

PhD Mathematics, [Brunel University](#), UK, 2013.
MSc Statistics, [Baghdad University](#), Iraq, 1999.
BSc Statistics, [Al-Qadisiyah University](#), Iraq, 1992.

Experience

Assistant Lecturer, [Al-Qadisiyah University](#), Department of Statistics, June 2000–October 2003.
Lecturer, [Al-Qadisiyah University](#), Department of Statistics, October 2003– October 2006.
Course in Mathematical statistics, [Université de Grenoble \(France\)](#), 2006.
Assistant Professor, [Al-Qadisiyah University](#), October 2006–present.
Teaching Assistant (GTA), [Brunel University](#), October 2010– June 2013.
Received Graduate Teaching Academy (GTA) Fellow Certification in 2013 from Brunel University.

Fields of Research Interest

[Quantile regression and distributions](#), [Model Selection](#), [Bayesian inference](#), [R Statistical packages](#).

Biography

I am a Professor of Statistics in the Department of Statistics at [University of Al-Qadisiyah](#). My current methodological research interests focus on Bayesian variable selection in quantile regression models. I am also interested in cosmology and gravitational lensing. Specifically, I am interested in understanding how small fluctuations in the early universe grew to form the large-scale structure observed today. (see , Gravitational lensing by $f(R,T)$ gravity).

Awards and Honors

1. Iraqi Science Day (First Place): Ministry of higher education and scientific research prize for best academic staff member who published papers in international scientific journals. (September, 2017)
2. Iraqi Science Day: Ministry of higher education and scientific research prize for best postgraduate student who published a paper from his research project in international scientific journals sober (May, 2014)
3. Brunel Vice-Chancellor's Prize for Doctoral Research (July 2013)

Grants

1. National Institute of Health Research: £68883, 2014–2015, PI with Joanne Lord and Keming Yu. Project: Bayesian quantile regression analysis of BMI. (2014-2015)

Publications

H-index 10 with Publications 2010 onwards

1. Alhamzawi, A. and Algamal, Z(2017). Bayesian bridge quantile regression. *Communications in Statistics - Simulation and Computation*. Accepted.
2. Rahim Alhamzawi (2017). Bayesian variable selection and coefficient estimation in heteroscedastic linear regression models. *Journal of applied statistics*. Accepted.
3. Rahim Alhamzawi (2017). Inference with three-level prior distributions in quantile regression problems. *Journal of Applied Statistics*, 44, 1947–1959.
4. Alhamzawi, A. (2017). Bayesian tobit quantile regression with $L_{1/2}$ penalty. *Communication in Statistics- Simulation and Computation*. Accepted.
5. Rahim Alhamzawi (2017). The Bayesian Elastic Net Regression. *Communication in Statistics- Simulation and Computation*, 1–13.
6. Rahim Alhamzawi (2017). Bayesian quantile regression for ordinal longitudinal data. *Journal of Applied Statistics*. Accepted.
7. Rahim Alhamzawi (2017). Web-based supplementary materials for “Bayesian Quantile Regression for Ordinal Longitudinal Data”. *Journal of Applied Statistics*. Accepted.
8. Alhamzawi, A. and Alhamzawi, R. (2016). Gravitational lensing in the strong field limit by modified gravity. *General Relativity and Gravitation*, 48(12), 167.
9. Rahim Alhamzawi (2016). Bayesian analysis of composite quantile regression. *Statistics in Biosciences*, 8(2), 358–373.
10. Rahim Alhamzawi (2016). Bayesian model selection in ordinal quantile regression. *Computational Statistics & Data Analysis*, 103, 68–78.
11. Taha Alshaybaweeab, Habshah Midi, Rahim Alhamzawi (2016). Bayesian elastic net single index quantile regression. *Journal of Applied Statistics*, 44(5), 853–871.
12. Keming Yu, Xi Liu, Rahim Alhamzawi, Frauke Becker, and Joanne Lord (2016). Statistical methods for body mass index: A selective review. *Statistical Methods in Medical Research*. Accepted.

13. Alhamzawi, A. and Alhamzawi, R. (2015). Gravitational lensing by $f(R, T)$ gravity. *International Journal of Modern Physics D*, 25(02), 1650020.
14. Alhamzawi, A. and Alhamzawi, R. (2015). Circular orbits in modified gravity. *Astrophysics and Space Science*, 358(2), 50.
15. Hashem, H., Vinciotti, V., Alhamzawi, R. and Yu, K. (2015). Quantile regression with group Lasso for classification. *Advances in Data Analysis and Classification*, 10(3), 375-390.
16. Alhamzawi, R. (2015). Model selection in quantile regression models. *Journal of Applied Statistics*, 42, 445-458.
17. Alhamzawi, R. and Yu, K. (2014). Bayesian Tobit quantile regression using g-prior distribution with ridge parameter. *Journal of Statistical Computation and Simulation*. 85, 2903-2918.
18. Alhamzawi, R. (2014). Bayesian elastic net Tobit quantile regression. *Communications in Statistics - Simulation and Computation*, 45(7), 2409-2427.
19. Yu, K., Dang, W., Zhu, H. and Alhamzawi, R. (2013). Comment on Article by Spokoiny, Wang and Härdle. *Journal of Statistical Planning and Inference*. 143: 1140-1144.
20. Alhamzawi, R. and Yu, K. (2013). Conjugate priors and variable selection for Bayesian quantile regression. *Computational Statistics and Data Analysis*. 64: 209-219.
21. Benoit, D., Alhamzawi, R. and Yu, K. (2013). Bayesian Lasso Binary Quantile regression. *Computational Statistics*. 28: 2861-2873.
22. Alhamzawi, R. (2013). Tobit Quantile Regression with the adaptive Lasso penalty. The Fourth International Arab Conference of Statistics. Accepted Oct 2013.
23. Alhamzawi, R. and Yu, K. (2012). Bayesian Lasso mixed quantile regression. *Journal of Statistical Computation and Simulation*. 84, 868-880.
24. Alkenani, A., Alhamzawi, R., & Yu, K. (2012). Penalized Flexible Bayesian Quantile Regression. *Applied Mathematics*, 3, 2155-2168.
25. Alhamzawi, R. and Yu, K. and Benoit, D. (2012). Bayesian adaptive Lasso quantile regression. *Statistical Modelling*, 12: 279-297.
26. Alhamzawi, R. and Yu, K. (2012). Variable selection in quantile regression via Gibbs sampling. *Journal of Applied Statistics*, 39: 799-813.
27. Alhamzawi, R., Yu, K., Vinciotti, V. and Tucker, A. (2011). Prior elicitation for mixed quantile regression with an allometric model. *Environmetrics*, 22: 911-920.
28. Alhamzawi R, Yu, K., Pan, J. (2011). Prior Elicitation in Bayesian Quantile Regression for Longitudinal Data. *J Biomet Biostat* 2:115.
29. Alhamzawi, R. and Yu, K. (2011). Power Prior Elicitation in Bayesian Quantile Regression. *Journal of Probability and Statistics*, vol. 2011, Article ID 874907, 16 pages, 2011.
30. Alhamzawi, R. and Yu, K. (2017). Bayesian Iterative Adaptive Lasso Quantile Regression. *IOSR Journal of Mathematics (IOSR-JM)* , vol. 13(3), 38-42.
31. Alhamzawi, R. and Yu, K. (2017). Inference with Normal-Jeffreys Prior Distributions in Quantile Regression. *IOSR Journal of Mathematics (IOSR-JM)* , *IOSR Journal of Mathematics (IOSR-JM)* , vol. 13(3), 4-9.

Papers Under Revision

1. Rahim Alhamzawi. Bayesian single-index quantile regression for ordinal data.
2. Rahim Alhamzawi. A New Gibbs Sampler for Bayesian Lasso.
3. Rahim Alhamzawi. The Bayesian Adaptive Lasso Regression.

Computer Skills

1. FORTRAN
2. Mathematica
3. MATLAB
4. SPSS
5. L^AT_EX
6. The R Project for Statistical Computing

R Softwares

- (a) Benoit, D., Alhamzawi, R., Yu, K., Poel, D. V. (2013). *bayesQR: Bayesian quantile regression*. R package version 2.1.
- (b) Alhamzawi, R. (2012). *Brq: Bayesian analysis of quantile regression models*. R package version 1.0.
- (c) Alhamzawi, R. (2012). *Aelasticnet: Bayesian Adaptive Elastic-Net for high dimensional sparse quantile regression models*. R package version 2.13.1.

Mathematica Software

- (a) Alhamzawi, A. and Alhamzawi, R (2014). *ATA: Advanced Tensor Analysis*. Mathematica package.

Recent Talks and Posters

- i. Alhamzawi, R. (2013). Modification of Elastic Net in High-Dimensional Poisson Regression Model. *The Fourteenth International Conference of Statistics, Iraqi Statistical Association. Al Mansour Hotel - Baghdad*. Al Rasheed Baghdad Hotel.
- ii. Alhamzawi, R. (2013). Tobit Quantile Regression with the adaptive Lasso penalty. *The Fourth International Arab Conference of Statistics*. Al Rasheed Baghdad Hotel.
- iii. Alhamzawi, R. (2013). *Bayesian Tobit quantile regression using g-prior distribution with ridge parameter*. YSM2013, UK. Imperial College London. 4th–5th July 2013, UK.
- iv. Alhamzawi, R. (2013). *Bayesian subset selection for fixed and random effects in quantile regression models*. YSM2013. Imperial College London. 4th–5th July 2013, UK.

- v. Alhamzawi, R.(2013). [Bayesian Quantile Regression](#). Day on Quantile Regression at the Royal Statistical Society Ú London, 29 May, UK.
- vi. Alhamzawi, R. and Yu, K. (2012). [Bayesian censored quantile regression using g-prior](#). Young Statisticians' Meeting. 2nd - 3rd April 2012. University of Cambridge, UK.
- vii. Alhamzawi, R. (2011). [Young Researchers in Mathematics](#). The University of Warwick, UK.
- viii. Alhamzawi, R. and Yu, K. (2010). [Prior elicitation in mixed quantile regression models](#). 3rd International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM'10), Senate House, University of London, UK.

Professional Activities

Editor-in-Chief

1. [AL-Qadisiyah Journal For Administrative and Economic sciences](#)

Editorial Board

1. [Eastern European Business and Economics Journal](#)
2. [Journal of Computation and Mathematics \(USA\)](#)
3. [Journal of Mathematical Modeling \(USA\)](#)
4. [Journal of Biomedical Materials Research \(USA\)](#)

Reviewer

1. [Statistical Modelling](#)
2. [Journal of the Korean Statistical Society](#)
3. [Computational Statistics & Data Analysis](#)
4. [Bayesian Analysis](#)
5. [Statistics & Probability Letters](#)
6. [BMC Medical Research Methodology](#)
7. [Journal of Statistical Computation and Simulation](#)
8. [Journal of Applied Statistics](#)
9. [Journal of Computation and Mathematics](#)
10. [Journal of Mathematical Modeling](#)
11. [Journal of Biomedical Materials Research](#)
12. [Hacettepe Journal of Mthematics and Statistics](#)
13. [JSciMed Central](#)

14. *Journal of Chemometrics***Teaching***Brunel University (United Kingdom)*

Mathematics for Economics (EC1005 level one modules): (2010-2011), (2011-2012), (2012-2013).

Statistics III (MA3970 Module): (2010-2011), (2011-2012).

Essential Skills: (2010-2011), (2011-2012).

Statistics II (MA2770 Module): (2011-2012).

Probability: (2011-2012).

Statistics: (2011-2012).

Al-Qadisiyah University

Statistics, Computer Programming (2000-2008).

Operation Research (2000-2007).

Stochastic Process, Simulations (2006-2008).

Statistical Inference, Time Series Analysis (2002-2004).

Multivariate, Linear Algebra (2000-2001).

Design and Analysis of Experiments (1999-2004).

Regression Analysis (2002-2004).

Mathematics (2000-2006).

Acknowledgements

1. Acknowledgement from Cogent Mathematics -Taylor & Francis. *Reviewer acknowledgement.*
2. Acknowledgement from BMC Medical Research Methodology, 2013. *Reviewer acknowledgement.*
3. Acknowledgement from Journal of Applied Statistics, 2010-2011. *Reviewer acknowledgement.*

Last updated: December 8, 2017