Dr. Safaa K. Kadhem

Contact Information:

Department of Mathematics & Computer
Applications
Faculty of Science
AL-Muthanna University   *E-mail:* safaa.kadhem@mu.edu.iq
Iraq/ AL-Muthanna/ Samawa City.

Research Interests: Markov chains, Hidden Markov models, Bayesian statistics.

Education:

Ph.D., in Statistics 2017, **Plymouth University**, UK.

M.Sc.,Statistics, 2003, **AL-Mustansiriyah University**, Iraq.

B.Sc.,Statistics, 1998, **Al-Qadisiyah University**, Iraq.

Language& Skills:

- English, Arabic

Technical Skills: Extensive experience with computers and numerous programming languages on a variety of operating systems:
- **Python**, **R**, **MATLAB**, **SPSS**, LaTeX.

Membership:

The Royal Statistical Society (RSS) 2014 present

Work experience:

Academic Experience: I taught several statistical modules at departments of faculty of science, AL Muthanna university, Iraq, which are:
- Biostatistics at department of Biology, First stage undergraduate (2003-2011).
- Computer Science at department of Biology, Second stage undergraduate (2003-2011).
- Numerical Analysis at department of Physics, Second stage undergraduate (2003-2008).
- Mathematical Statistics at department of mathematical and computer applications, Third stage undergraduate (2017- to date).
- Advance biostatistics at department of Biology, post-graduate, MSc. (2017- to date).

Publications & Book reviews:

Publications:

Kadhem, S. K., Hewson, P. & Kaimi, I. (2016). Recursive Deviance Information Criterion for the Hidden Markov Model. *International Journal of Statistics and Probability, 5(1)*, 61-78. DOI: http://dx.doi.org/10.5539/ijsp.v5n1p61

Kadhem, S. K. (2016). Using hidden Markov models to model spatial dependence in a network. (*Under review: Applied Spatial Analysis and Policy Statistics*)

Book reviews:

Kadhem, S. K. (2017). Handbook of discrete-valued time series by Richard A. Davis, Scott H. Holan, Robert B. Lund, and Nalini Ravishanker, *Journal of the Royal Statistical Society A, Volume 180, Issue 2, February 2017, Pages 682-683*.

Posters & conference presentations:

Kadhem, S. K. Bayesian Criteria for Model Choice for Hidden Markov Models. *International Conference of the Royal Statistical Society.* Exeter University, UK, 7-10 Sept. 2015.

Training Courses attended:

- Academy courses for PhD training in statistics
  . Statistical Computing and Statistical Inference, University of Cambridge, Cambridge, UK, 2013.
  . Applied Stochastic Process and Computer Intensive Statistics, Leeds University, Leeds, UK, 2014.