NOHA A. YOUSSEF   **CURRICULUM VITAE**

CONTACT INFORMATION
Department of Mathematics and Actuarial Science
American University in Cairo
Cairo
Egypt.
Email:nayoussef@aucegypt.edu

RESEARCH INTERESTS
Design of computer experiments, Bayesian optimal design, Optimal design of
experiments,Mixed effects models, Longitudinal data with non-random dropouts, Temporal
disaggregation.

QUALIFICATIONS
Fellowship of the Higher Education Academy in the UK, July 2012.

Ph.D. in Statistics, Oct 2006-2011,
London School of Economics and Political Science (LSE), UK.

Post Graduate Certificate for teaching in Higher Education , Oct 2008- May 2010,
London School of Economics and Political Science (LSE), UK.

M.Sc in Statistics "Excellent", Feb 2005,
Faculty of Economics and Political Science, Cairo University.

B.Sc in Statistics "Excellent with Honors", May 1999,
Faculty of Economics and Political Science, Cairo University.

EMPLOYMENT HISTORY
American University in Cairo
   Assistant professor at the Mathematics and Actuarial Science Department September 2012-
   present.
   Courses Taught:
   Statistical Reasoning, Statistics for Business and Time Series Analysis.

London School of Economics and Political Science
   Teaching fellow at Statistics Department October 2010-October 2012.
   Research officer in CATS, April 2010-September 2011.
   Graduate Teaching Assistant & Associate Examiner , 2007-August 2012.

Courses Taught:
Elementary Statistical Theory, Bayesian Statistical Theory, Regression Diagnostics and Generalized Linear Modelling.

London Business School
   Teaching Assistant 2007-2012.
   Courses Taught:
   Foundation Course in Statistics for MBA, JEMBA.

Information and Decision Support Centre (The Cabinet Office of the Egyptian government)
   Statistician May 2005-Oct. 2006.

Cairo University, Faculty of Economics and Political Science, Statistics Department
   Assistant Professor 2012-2015
   Assistant Lecturer Feb. 2005 – 2012.
   Teaching Assistant Nov. 1999 – Feb 2005.
   Courses Taught:
   Principles of Statistics, Principles of Mathematics, Mathematics for Economists, Mathematical Analysis, Probability Theory (1),Non-Parametric Statistics, Categorical Data Analysis, Demography, Time Series Analysis.

AWARDS
   Statistics Research Studentship, LSE, 2008-2009.
   Statistics Research Studentship, LSE, 2007-2008.
   EPSRC, MUCM (Managing Uncertainty in Complex Models) grant EP/D048893/1.

CONFERENCES AND WORKSHOPS ATTENDED
1. mODa 11, Model Oriented Data Analysis, Dortmund, June 2016, poster title "Optimal Design for Nonlinear Mixed Effects Models via Approximating Fisher Information Matrix".
2. The 8th International Conference of the ERCIM Working Group on Computing & Statistics, London, UK, December 2015, Talk title "Approximate Optimal Design for Generalised Mixed Effects Model".
3. GRF-Sim workshop: Simulation of Gaussian and related Random Fields (Bern, November 24-26 2014), Talk title "A discussion on adaptive design for computer experiments".
4. The 6th International Conference of the ERCIM Working Group on Computing & Statistics, London, UK, December 2013, Talk title "Approximate Bayesian Adaptive Optimal Design for Computer Experiments".
5. mODa 10, Model Oriented Data Analysis, Bertinoro, Poland, June 2013, Talk title "Comparing Optimal Designs of Computer Experiments For Estimating Covariance Parameters".
6. The 4th International Conference of the ERCIM Working Group on Computing & Statistics, London, UK, December 2011,Talk title "Partial Maximum Entropy Sampling criterion for computer experiments".

7. DEMA Conference, Isaac Newton Institute for Mathematical Science, Cambridge, UK, August 2011, a poster titled "Partial Maximum Entropy Sampling criterion for computer experiments".
8. Slow Morning in Algebraic Statistics, Genoa, Italy, March 2011,Talk title "Gaussian quadrature, Smolyak-type grids and algebraic statistics", Henry Wynn and Noha Youssef.
9. ENBIS-DEINDE, Spring conference on the design of experiments, Turin, Italy, March 2011, Short course on design of computer experiments, Henry WYnn and Noha Youssef.
10. UCM2010,Uncertainty in Complex Models, Sheffield, UK, July 2010 Poster title "Application of Karhunen Loeve Expansion in the Design of Computer Experiments".
11. mODa 9, Model Oriented Data Analysis, Bertinoro, Italy, June 2010, Talk title "Bayesian Sequential Optimal Design of Computer Experiments".
12. EURISBIS'09, European Regional Meeting of The International Society for Business and Industrial Statistics, Cagliari, Italy, June 2009, Talk title " A 2-Stage Design Procedure for the Design of Computer Experiments".
13. OPTEX, Model Based Optimal Experimental Design for Non-Linear Processes, Heidelberg, Germany, November 2008, Talk Title "Maximum Entropy Sampling for Derivative Information".
14. Advanced Topics in Design of Experiments, Isaac Newton Institute for Mathematical Science, Cambridge, UK, July 2008.
15. DEMA Conference, Isaac Newton Institute for Mathematical Science, Cambridge, UK, August 2008.
16. Research Students Seminar, LSE, June 2006.

PHD TRAINING COURSE
London Taught Course Center; Applied Bayesian Methods, High-Dimensional Bayesian Inference, Algebraic Statistics and Advanced Computational Methods in Statistics

PUBLICATIONS
1. Abdellatif, Lobna, Mohamed Zaky, Mazen Hassan, and Noha Youssef (2016) Fiscal transparency puzzle and electoral institutions: applying a 3Ds approach for tracking the action cycle in Egypt, The Journal of Legislative Studies, 1,21,1357-2334.

2. Wynn, H. and Youssef, N., A discussion of adaptive design for computer experiments, in the proceedings of the 58th World Statistical Congress, 2011, Dublin, 1251-1260, Int. Statistical Institute.
3. Youssef, N. Optimal Experimental Design For Computer Experiments, PhD thesis, Department of Statistics, London School of Economics, 2011.
4. Youssef, N. Linear Mixed Effects Model for Longitudinal Data with Non-Random Dropout, M.Sc thesis, Department of Statistics, Faculty of Economics and Political Science, Cairo University, 2005.
5. Gad, A. M. And Youssif, N. A. (2006), Linear Mixed Models for Longitudinal Data with Non-random Dropouts, Journal of Data Science, **4**, 447-460.

RESEARCH CURRENTLY IN PROGRESS
1. Approximate optimal design for nonlinear mixed effects model.
2. Bayesian optimal designs for computer experiments using ABC and MCMC methods.
3. Bayesian Sequential Optimal Design for Computer Experiments Using Wishart Distribution.
4. Partial Maximum Entropy Sampling Design using the Karhunen-Loeve Expansion.

COMPUTER SKILLS
Statistical Packages: SPSS, Minitab, STATA
Programming Languages: Matlab, R
Publishing: LATEX, Microsoft Office

LANGUAGE SKILLS
Arabic (Mother Tongue), English (Fluent), French (Basic)

OTHER ACTIVITIES
Senator at the American University in Cairo Senate and a member of the senate budget review committee, May 2014-present.

Statistical Consulatant at UN-HABITAT, Providing statistical advice on the following project "Reshaping the administrative boarders of regions and governorates in Egypt", Sept. 2013-May 2014.

Consultant at Baseera, the Egyptian center for public opinion research, Reviewing the statistical tools and methods used in analyzing and presenting the data of Oman 2010 census. Feb. 2014-April 2014.

Member of the research committee of the Statistics department, London School of Economics, 2011/2012.

Member of the working team of Quality Assurance and Accreditation Project(QAAP) at Faculty of Economics and Political Science, Cairo University, Dec 2004- present

Member of the organizing committee if the 11th "Statistics and Computer Modelling Conference" held at Faculty of Economics and Political Science, Cairo University.

REFEREES
Upon Request.