# DR. MARYAM ILYAS

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### **EDUCATION**

- PhD (Statistics), Department of Statistical Science, University College London (UCL), UK. 22<sup>nd</sup>
   September 2014 28<sup>th</sup> September 2018
  - Thesis title: Quantification of uncertainties in global temperatures using multi-resolution lattice kriging
  - Supervisors: Prof. Serge Guillas and Dr. Christopher Brierley
- M.Phil (Statistics), CGPA 3.727, University of the Punjab, Lahore, Pakistan.
   2005 2009
   Thesis title: Principal component analysis & common factor analysis: A comparative study
- M.Sc. (Statistics), 1<sup>st</sup> division, University of the Punjab, Lahore, Pakistan. 2002 2004
- B.Sc. (Mathematics & Statistics), 1<sup>st</sup> division, Lahore College for Women University, Lahore,
   Pakistan.

# **EMPLOYMENT**

- Assistant Professor, College of Statistical and Actuarial Sciences, University of the Punjab,
   Lahore, Pakistan.
- Lecturer, College of Statistical and Actuarial Sciences, University of the Punjab, Pakistan. May 2010 - October 2018
- Assistant Professor, University of Central Punjab, Pakistan.

  January 2010 May 2010
- **Lecturer**, University of Central Punjab, Pakistan.

  October 2007 December 2009
- Lecturer (visiting position), University of Central Punjab, Pakistan.
   August 2006 September 2007

# **AWARDS**

- 1. Awarded the status of HEC (Higher Education Commission) approved PhD supervisor in the discipline of Physical Sciences on 25<sup>th</sup> Feb., 2019.
- 2. Funding awarded by National Center for Atmospheric Research (NCAR), Boulder, USA for 02 months visit to NCAR (Feb. to Mar., 2018). (2,000 USD)
- 3. Funding awarded by University of Georgia, USA, and UCL, UK, for 04 days visit to University of Georgia ( $20^{\rm th}$  to  $23^{\rm rd}$  Mar., 2018). (290 GBP)
- 4. Funding awarded by CliMathNet ReCoVER, UK , for visiting NCAR for 03 months (Nov. to Jan., 2018).  $(5{,}497~\mathrm{GBP})$
- 5. Funding awarded by NCAR, USA , for 03 months (22nd Feb. to 18th May 2017) visit. (6,000 USD + 570 GBP)
- 6. Funding awarded by UCL for invited talk in a conference in Bergamo, Italy (24<sup>th</sup> to 27<sup>th</sup> Jul., 2017). (688 GBP)
- 7. Funding awarded by UCL for conference in University of Exeter, UK (5 $^{\rm th}$  to 8 $^{\rm th}$  Jul., 2016). (256 GBP)
- 8. Funding awarded by UCL for training in Southampton, UK (1st to 4th Jun., 2015). (216 GBP)
- 9. Best Student Poster award at the Fourth Annual CliMathNet Conference, 2016, Exeter, UK.
- 10. Tuition fee scholarship by UCL Overseas Research Scholarship (ORS) awarded in the year 2014 for PhD study in statistical sciences at University College London, UK. (49,586 GBP)

11. University of the Punjab Overseas Scholarship (living allowance for 3 years and airfare) awarded in the year 2014 for PhD study in statistical sciences at University College London, UK. (PKR 4.126563 Million)

# **PUBLICATIONS**

- 1. Ilyas, M., Brierley, C.M., Guillas, S. (2017). Uncertainty in regional temperatures inferred from sparse global observations: application to a probabilistic classification of El Niño, Geophysical Research Letters, 44(17), 9068-9074. https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017GL074596 (IF: 4.339)
- 2. Arif, S., & Ilyas, M. (2017). Using structural equation modeling to construct student satisfaction models for private universities of Pakistan, Journal of Quality and Technology Management, 14(2), 39-37. http://pu.edu.pk/images/journal/iqtm/PDF-FILES/03-xiv\_2\_dec2017.pdf
- 3. Arif, S., & Ilyas, M., Hameed, A. (2013). Student satisfaction and impact of leadership in private universities, The TQM Journal, 25(4), 399-416. http://www.emeraldinsight.com/journals.htm?articleid=17090183&ini=aob
- 4. Arif, S. Ilyas, M. (2013). Quality of work-life model for teachers of private universities in Pakistan, Quality Assurance in Education, 21(3), 282 298. http://www.emeraldinsight.com/journals.htm?articleid=17086147
- 5. Arif, S. Ilyas, M. (2012). Creating a quality teaching learning environment, The International Journal of Learning, 18(6), 51-70. http://ijl.cgpublisher.com/product/pub.30/prod.3247
- 6. Arif, S. Ilyas, M. (2011). Leadership, empowerment and customer satisfaction in teaching institutions: Case study of a Pakistani university, The TQM Journal, 23(4), 388-402. http://www.emeraldinsight.com/journals.htm?issn=1754-2731&volume=23&issue=4&articleid=1937256&show=abstract
- 7. Arif, S. Ilyas, M. (2011). Quality management of technology related services for student satisfaction at private universities of Pakistan. The International Journal of Business and Management Research, IJBMR, 4(1), 55-76. http://www.ijbmr.org/all\_issues

# **PRESENTATIONS**

- 1. Coverage uncertainties in global temperature fields, Invited Speaker in TIES-GRASPA 2017 on Climate and Environment at University of Bergamo, Italy, 24-27<sup>th</sup> July, 2017.
- 2. Lattice kriging using ABC, IMAGe Brown Bag Seminar at NCAR, USA, 8th May, 2017.
- 3. Interpolation uncertainties in global temperature fields, IMAGe Brown Bag Seminar at NCAR, USA, 13<sup>th</sup> Mar., 2017.
- 4. Trends and propagation of uncertainties in the spatial distribution of temperatures to ENSO uncertainties using multi-resolution lattice kriging, PhD Seminar at Department of Statistical Science, UCL, UK, 8<sup>th</sup> Feb., 2017.
- 5. Propagation of uncertainties in temperatures to ENSO uncertainties, presentation at the London Ocean Group meeting at Department of Geography, UCL, UK, 25<sup>th</sup> July 2016.
- 6. Ilyas, M., Guillas, S. & Brierley, C. (2016). Propagation of uncertainties in the spatial distribution of temperatures to ENSO uncertainties using multi-resolution lattice kriging, poster presented at the Fourth Annual CliMathNet Conference in University of Exeter, UK.
- 7. Ilyas, M., Guillas, S. & Brierley, C. (2016). Propagation of uncertainties in the spatial distribution of temperatures to ENSO uncertainties using multi-resolution lattice kriging, poster presented at the MAPS Faculty PhesDival in UCL, UK, 15<sup>th</sup> June 2016.
- 8. Ilyas, M., Guillas, S. & Brierley, C. (2015). Temperature trends from incomplete records accounting for ENSO variability, poster presented at the First Past Earth Network (PEN) Conference in Crewe Hall, UK, 1-4 Sep.

#### **TRAININGS**

- 1. Training workshop on *Scopus Database* on 20<sup>th</sup> February, 2019 at University of the Punjab Library Auditorium, Lahore, Pakistan.
- 2. Short course on *Introduction to Statistics for Spatio-Temporal Data* at NCAR, Boulder, USA, 3<sup>rd</sup> March, 2017.
- 3. Short course on *Introduction to Bayesian Analysis and MCMC* at University of Southampton, UK, 1-2 Jun., 2015.
- 4. Short course on *Hierarchical Modelling of Spatial and Temporal Data* at University of Southampton, UK, 3-4 Jun., 2015.
- 5. LTCC (London Taught Course Centre) course on  $Applied\ Bayesian\ Methods,\ 19^{\rm th}\ Jan.-16^{\rm th}\ Feb.,\ 2015.$
- 6. Course on Introduction to Scientific Programming in Python at UCL, UK, 9-13 Feb., 2015.
- 7. Course on Introduction to High Performance and Throughput Computing using Legion at UCL, UK, 26-27 Nov., 2014.
- 8. Course on Introduction to the Unix shell at UCL, UK, 30<sup>th</sup> Oct., 2014.
- 9. LTCC course on Advanced Computational Methods in Statistics, 29th Sep.-27th Oct., 2014.
- 10. Course on LaTeX with BibTeX at UCL, UK,  $8^{\rm th}$  Oct., 2014.
- 11. Course on Regional Workshop on Collection and Analysis of Data on Drug Use by UNODC at Marriott, Islamabad, Pakistan, 1-4 Jul., 2013.
- 12. Course on Introduction to Structural Equation Modeling using AMOS at COMSATS, Pakistan, 23-24 Apr., 2010.
- 13. Course on *HRDC New Faulty Orientation Program* at IAS, University of the Punjab, Pakistan, 5-8 Jul., 2010.
- 14. Course on *Citing and Referencing using Endnote* at IBA, University of the Punjab, Pakistan, 9<sup>th</sup> Feb., 2008.