

Diego Andrés Pérez Ruiz

Date of Birth: June 17, 1986.

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Experience

Data Analyst, **Mosscare St Vincent's Housing Group**, 7th Floor, Trafford House, Manchester, UK. Developing, implementing and maintaining the Asset Management databases to enable the development, procurement, monitoring and review of asset investment programmes.

December, 2019 - Present .

Research Associate in Statistics, **University of Manchester, School of Mathematics**, Manchester, UK. Carrying a specific research agenda under the supervision of Dr. Peter Foster.

August 2019 - November 2019.

Research Associate in Social Statistics, **University of Manchester, School of Social Statistics**, Manchester, UK. Carrying a specific research agenda under the supervision of Prof Wendy Olsen.

January 2019- July 2019.

Education

PhD. in Mathematical Sciences, **University of Manchester, School of Mathematics**, Manchester, UK.

September 2014- February 2019.

M.Sc. in Probability and Statistics, **Center for Mathematical Research (CIMAT)**, Guanajuato, Mexico. 2009-2011.

*Summer Session: **Stanford University**, Palo Alto, CA, Graduate Courses in Statistics, Summer 2009.*

B.Sc. Applied Mathematics and Computer Science, **National Autonomous University of Mexico (UNAM)**, 2004-2008.

*Honors: **Summa Cum Laude** and Gabino Barreda medal (given to the top student of each class).*

High School Honors Diploma **Monterrey Institute of Technology and Higher Education (ITESM)**, 2004.

Fields of Interest

Bayesian Statistics, Computational Statistics, Nonparametric Statistics, Functional Data, Time Series. Machine Learning, Data Analysis, Data Optimization, Multivariate Statistics. Statistical Modelling, Official Statistics Methodologies, Resampling Methods, Missing Data Imputation. Survey Methodology.

Awards

International Association of Survey Statisticians (IASS) 2019 **Cochran-Hansen Prize**. Through the Cochran-Hansen Prize, the International Statistical Institute, the most important statistical institution, acknowledges the high degree of novelty and social impact of my research.

ISI-World Bank and IASS Travel Award for Young Statisticians from Developing and Transition Countries, International Methodology Symposium, Canada April, 2014.

Research

Publications

Worth Chris, Al Hashmi Laila , Yau Daphne, Salomon-Estebanez Maria, **Pérez Ruiz** Diego, Hall Caroline, O'Shea Elaine, Pimlott Helen, Foster Peter, Flanagan Sarah, Cosgrove Karen, Dunne Mark, Banerjee Indraneel. *Five Year Natural History Outcomes of a Cohort of Children with Hypoglycaemia due to Hyperinsulinism*. **Submitted to** : Orphanet Journal of Rare Diseases.

Sakshaug W Joseph, Wiśniowski Arkadiusz, **Pérez Ruiz** Diego Andrés, and Blom Annelies (2019). *Combining Scientific and Non-Scientific Surveys to Improve Estimation and Reduce Costs*. Pathways Between Social Science and Computational Social Science: Theories, Methods and Interpretations, Eds: T. Rudas, P. Gábor, and V. Gorczeski.

Sakshaug W Joseph, Wiśniowski Arkadiusz, **Pérez Ruiz** Diego Andrés, and Blom Annelies (2019). *Integrating Probability and Nonprobability Samples for Survey Inference*. Journal of Survey Statistics and Methodology.

Sakshaug, J.W., Wiśniowski, A., **Pérez Ruiz**, D.A., and Blom, A.G. (2019). *Supplementing Small Probability Samples with Nonprobability Samples: A Bayesian Approach*. Journal of Official Statistics, 35(3), 653-681.

Afuecheta, Emmanuel, Semeyutin, Artur, Chan Stephen, Nadarajah Saralees, **Pérez Ruiz** Diego Andrés (2019). *Compound models for distributions of financial returns*. **Submitted to** : Statistical Methods and Applications Springer.

Afuecheta, E., **Pérez Ruiz**, D. A., Utazi, C., and Nwosu, C. (2016). *On the flexibility of GARCH-family models with an application to the BRICS stock indices*. Communications in Statistics: Case Studies, Data Analysis and Applications, 2(1-2), 44-77.

Afuecheta, Emmanuel, Chigozie Utazi, and **Pérez Ruiz** Diego Andrés. *A statistical analysis of fatalities resulting from Boko Haram activities*. African Journal of Applied Statistics 3.1 (2016): 101-120.

Christen, Fox, **Pérez-Ruiz** and Santa-Cibrain *On optimal direction gibbs sampling*, 2012.
<http://arxiv.org/pdf/1205.4062.pdf>

Popularization

Pérez Ruiz, Diego Andres *Los Fractales: Un tema matemático de actualidad*, AenE Publicación con Sentido, México, 2011. <http://www.aene.mx/>

Books Reviews

Book Review Journal of Statistical Software - Modern Optimization with R, 2016.

Book Review ISI - Bayesian Nonparametric Data Analysis, Springer Series in Statistics, 2015.

Book Review Technometrics - Fast Compact Algorithms and Software for Spline Smoothing Springer Briefs in Computer Science, 2013.

Work Experience and Academic Experience

University of Manchester

Research assistant at the School of Social Statistics, The University of Manchester, under the supervision of Dr Arkadiusz Wiśniowski, 2016 - 2017.

Teaching Assistant, Mathematics 1E1, Mathematics of2, Computational Statistics, Markov Chain Monte Carlo, Inferential Statistics , Introduction to Statistics - Manchester University, 2014, 2015.

Professional Activities

Professional Affiliations

Member of the International Association of Survey Statisticians (IASS), International Society for Bayesian Analysis (ISBA), the Royal Statistical Society (RSS), the American Statistical Society (ASA), the International Statistical Institute (ISI), the Young Statisticians Group (IASC), the Institute of Mathematics and its applications (IMA).

Most Recent Conferences and workshops attended:

62nd ISI World Statistics Congress (WSC) , Kuala Lumpur, Malaysia from 18th to 23rd August 2019.

Transport for Greater Manchester Open Data Workshop - GMDDataHive, Manchester, UK 5 September 2019.

Turing Network Data Study Group, The Alan Turing Institute and University of Bristol, Bristol, UK from 5 to 9 August 2019.

Community Service

Volunteer Royal Statistical Society- Statistics for Journalist. *Volunteer* Royal Statistical Society - Science for Journalist.

Computer Skills

Languages: R, R - Bugs, R - Stan, SAS, Stata, Matlab, Python, C/C++.

DataBases: SQL. *Operating systems:* Linux, Windows. *Scientific software:* Mathematica, Minitab, Maple, SPSS.

Languages

English (fluent), Spanish (native), Italian (fluent).