

Maria Teresa Ortiz Mancera

teresa.ortiz.mancera@gmail.com | +521.777.492.4743

EDUCATION

UNIVERSITY OF MICHIGAN

M.A. APPLIED STATISTICS

2012 - 2013 | Ann Arbor, MI

SAMPLING PROGRAM FOR

SURVEY STATISTICIANS

Summer 2013 | Ann Arbor, MI

ITAM

BS IN APPLIED MATHEMATICS

2005 - 2009 | Mexico City, Mexico

CERTIFICATIONS

edX Introduction to Big Data with

Apache Spark

edX Scalable Machine Learning

Coursera The Data Scientist's Toolbox

Stanford online Databases

SKILLS

DATA ANALYSIS

Statistical modeling (hierarchical models, spatial statistics, Bayesian networks), Survey design and Survey data analysis, Machine learning, Data visualization.

PROGRAMMING

R, Python, SAS, SQL, Git,

Rmarkdown, Shiny.

COMMUNITY

R-Ladies CDMX, co-founder and co-organizer (2017-present).

Mexican Statistical Association, board committee member (2019-present).

Fulbright García Robles Grants, experts evaluation committee member (2016-2019).

Community of Bioinformatics Software Developers (CDSB), instructor in the 2018 and 2019 CDSB workshops.

1000 Girls, 1000 Futures, mentor of high-school girls (2015-2017).

LINKS

Github:// tereom

LinkedIn:// tereom

Personal:

https://tereom.netlify.com

PROFESSIONAL EXPERIENCE

CONABIO/GIZ | ADVISOR

2014 - present | Mexico City

CONABIO is a government agency concerned with the study and preservation of Mexican biodiversity. I primarily work in a project for biodiversity monitoring based on large scale in situ collections of sound, photographs, and videos.

- Develop R packages and shiny applications meant to analyze sounds, to generate automatic reports, and to create visualizations of the information stored in our databases.
- Advise and participate in the development of statistical models, for example, the modeling of ecological integrity with Bayesian belief networks.

INE-COTECORA | ASSISTANT

2018 | Mexico City

The National Election Institute's technical committee is created whenever National and Governor elections take place, the committee publishes estimations on election day based on the results of a sample of polling stations.

- Participated in the development of a post-stratification model with multilevel regression used to anticipate the final results of the 2018 elections.
- Developed an R package implementing the methodology (quickcountmx).

LQL | ANALYST

2009 - 2011 | Mexico City

LQL is a consulting firm focused in marketing research and predictive modeling.

- Performed analysis of survey data (market segmentation, conjoint analysis) and participated in survey design.
- Designed and implemented automatic reports for survey based studies.
- Developed computational tools in R and Python to improve the efficiency of the analysis area.

ACADEMIC EXPERIENCE

ITAM | LECTURER

2014 - present | Mexico City

Courses Taught

- MSc Data Science: Computational Statistics, Multivariate Statistics.
- BSc Mathematics/BSc Actuarial Sciences: Exploratory Data Analysis and Survey Sampling.

Undergraduate Thesis Advisor

- Andres Sanudo. Analysis of the demand for parking space in Mexico City, BSc in Mathematics, 2015.

UNIVERSITY OF MICHIGAN | RESEARCH ASSISTANT

2013 - 2014 | Ann Arbor, MI

Worked with Prof. James Lepkowski in the imputation of missing values in ten US fertility surveys extending back to 1955.

ITAM | UNDERGRADUATE THESIS

2012 | Mexico City

Worked under the supervision of Prof. Luis Enrique Nieto on a Bayesian analysis of school performance based on a Mexican standardized test (ENLACE).

HONORS AND AWARDS

- 2013 Outstanding 1st year Applied Masters Student in 2012-2013, University of Michigan.
- 2013 Tuition waiver to attend the Sampling Program for Survey Statisticians, University of Michigan Institute for Social Research.
- 2012 Fulbright-García Robles grant for master studies, U.S. Department of State.
- 2012 CONACYT scholarship for graduate studies in foreign countries, CONACYT.
- 2012 Honorable Mention for undergraduate thesis, ITAM.