Boris Polanco

Mathematical Engineer

Personal Information

Nationality	**Ecuadorian**, *Residence Permit B*, Born January 11th 1989.
Availability	**Break summer: 50 % From September(Autum Semester) 80 %**.
Personal Email	**boriscout@hotmail.com**.

Education

Since 2016   **Master of Science in Statistics**, *University of Bern*, Bern.
I have passed the first semester of this three semester program, currently I am studying for the exams of the second semester. I have taken lectures as Linear models and regression 1 and 2, Stochastic models in finance and insurance, non life insurance, life insurance, stochastic simulation, computational aspects of linear models, seminar in cryptography, seminar in modeling in extremal events, advanced course in probability, survival data analysis.

2008 − 2014   **Mathematical Engineering**, *Escuela Politécnica Nacional*, Quito-Ecuador, I studied my bachelor in applied mathematics in Ecuador, it was focused in statistics and operational research, I have attended many courses and I have learned different mathematical issues deeply..

Thesis Project

Title	*Estudio comparativo de la desaceleración de la mortalidad en adultos mayores para la población ecuatoriana.*
Director	Dr. Luis Horna, Phd
Summary	The results are obtained by fitting several mortality data to certain typical functions in survival analysis using the least squares method. After some statistical validation process, the best-fitted curve is selected using certain statistical criteria. Then, two alternatives are examined in order to determine the age at which the mortality deceleration process starts. Finally, a comparison between the obtained results is performed. The data used in this research corresponds to population projections obtained from Instituto Nacional de Estadistica y Censos (INEC) and mortality tables taken from a previous thesis. All the numerical calculations are derived by using the programming language and environment R, which is a free software project for statistical, graphic and numerical analysis.

http://bibdigital.epn.edu.ec/bitstream/15000/10515/1/CD-6223.pdf ,

Work Experience

February 2016-August 2016	**Actuary**, Actuarial and Research Office. Ecuadorian Institute of Soial Security, I was involved in the preparation of studies and research, technical reports about the actuarial financial situation of the different insurance scchemes of the institute
June 2015-January 2016	**Actuarial Consultant**, ACTUARIA Consultores Cia Ltda, . My duties included: Worked in the data cleansing of different datasets in R provided by Ecuadorian Insurance companies. Also, I developed of frequency and severity models with mathematical and statistical techniques. Generation of reports of different of non life insurance schemes.
Mayo 2014-Mayo 2015	**Sampling desing asistant**, DINEM, National Institute of Statistics and Census Bureau INEC. My tasks were related to the development and implementation of algorithms in order to generate several samples corresponding to the national survey of employment. All the algorithm was developed in SPSS, excel and R
Julio-Noviembre 2013	**Private Consultant**, FARMAENLACE Quito Ecuador, I worked as an assitant for two of my professors of my bachelor's program in Quito. I assisted in the development of supply chain inventory model using time series models to predict sales of a chain of pharmacies in Ecuador..

Other Courses

October-December 2015	**EDX-The Australian National University**, *Introduction to Actuarial Science*, Lenght: 2 months.
November 2015	**Datacamp**, *Introduction to R. Intermediate Level*, Lenght: 8 hours.
November 2015	**Datacamp**, *Introduction to R. Basic Lever*, Length: 8 horas.
March 2015	**INEC**, *SPSS*, Length: 20 hours.
$7 - 18$ July 2014	**INEC**, *SPSS to construct survey indicators*, Length: 20 hours.
July-August 2014	**INEC**, *R basic level*, Length: 20 hours.
$6 - 8, 21 - 22$ August 2014	**INEC**, *Introduction to mathematical modelling with R*, Length: 20 hours.
February 2012	**Vale dos Vinhedos, Rio Grande do Sul, Brazil February 5-10, 2012**, *Latinoamerican School in Operational Research ELAVIO* 2012, Length: 120 hours, http://www.inf.ufrgs.br/elavio2012/elavio2012/.

Language Skills

Spanish	, Mother Tongue.
English	, C1.
German	, Basic.

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Honors and Awards

Mathematical Engineer	, CUM LAUDE.
SENESCYT Scholar	, I got the scolarship given by the Ecuadorian Government to the most successful applicants. I have chosen to study at the university of Bern the master porgram in statistics with this fund..

Computational Skills

- C++
- R advanced (Generation of complex functions, Dynamic reports, Dynamic plots.)
- Latex Software (Scientific Text Edition)
- Excel (Office in general)
- SQL Language
- SPSS

Personal Interests

- Mathematical Statistics
- Actuarial Mathematics
- Probability
- Financial Mathematics
- Mathematical Modeling
- Data Analysis
- Data visualization