Tlahui Bolaños

Actuary & Data Scientist

▬▬▬▬▬ Personal Statement

I am a motivated, pro-active and team-player Actuary and MSc. in Data Science with experience in Reserves, Risk Analysis, Data Analysis and ETLs. My main objective is to implement Data Science models within the Tech industry, mainly focusing in the balance between results communication and performance by bridging the gap between IT and Management.

▬▬▬▬▬ Personal Skills

— **Independent Problem Solver.** Agroasemex's databases were almost doubling their size every year, and neither the Excel & VBA combo nor Access could handle the process for Contingent Reserves. After my research, the KNIME platform was chosen to fulfill these tasks, and the whole process was migrated there while also automating large sections of the process in R. This took about a year, and was done in parallel with the monthly calculation of Reserves, which was my main responsibility.

— **Both Technical & Business Skills.** As a part of the Data Management Team at Higo, our main focus in the Startup phase of the company was to provide timely and effective data to the Management, Project Managers, Sales and Customer Success teams. For this, I needed to collaborate closely with the people in those teams, understanding their data needs and building dashboards and integrations between our tools and DWH to support the ecosystem.

— **Multidisciplinary Team Player.** AMIS, the most important insurance company association in Mexico, has been developing a crop risks model for the past few years, which is planned to be used by every company offering agricultural insurance. I had the opportunity to assist various meetings representing Agroasemex and to work with various professionals such as Agricultural Engineers, Veterinaries, Geologists, Atmospheric Scientists, amongst others. Being one of the members with the most programming skills, I was able to work closely with the specialists building the software and detected/corrected numerous malfunctions in the system, as well as proposed a change in one of the calculation methods which had an important impact in the final use of the system.

▬▬▬▬▬ Technical Skills

— Programming languages :
  Python, SQL, R, Matlab, VBA, Spark,
— Microsoft Office & Macros :
  Excel, Access, Word, PowerPoint,
— Statistical Software : **KNIME, SAS, Minitab, SPSS**,
— Text writing with LaTeX.

▬▬▬▬▬ Language Skills

— **Spanish.** Native speaker,
— **English.** Advanced (C1),
— **German.** Basic (A2),
— **Finnish.** Basic (A1).

Education

2014 – 2018 **Universidad Autónoma de Querétaro**, Bachelor's in Actuarial Sciences (4.97/5)
— **Dissertation :** *Mexican Stock Exchange Clustering employing Time Series Analysis.* This project combined methods from Stochastic Processes and Data Science to uncover hidden similarities in the behaviour of different companies' stocks.
— **Major courses :** Risk Theory, Actuarial Models, Parametric and Non-parametric Statistics, Stochastic Processes.

2019 – 2021 **University of Helsinki**, MSc in Data Science (4.6/5)
— **Dissertation :** *Transfer Learning with Label Adaptation for Counterparty Rating Prediction.* A new method called Stable Linear Regression was developed for Label Adaptation of credit ratings amongst different rating agencies.
— **Major Courses :** Machine Learning, Artificial Intelligence, Data Science, Inverse Problems, Statistical Data Science, Financial Economics, Life Insurance Mathematics.

Experience

2016 –2019 **Accumétrica**, *Associate (Projects)*
— **Description :** Mexican SME focused on poll implementation and statistical analysis.
— **Projects :** Airport fares optimization model, live elections poll results analysis, virus' drug immunity analysis.

2016 – 2019 **Agroasemex**, *Various (Full-Time)*
— **Description :** Biggest government-owned insurance company in Mexico, specialized in agricultural reinsurance. I started as an intern and finished as an Actuarial Manager.
— **Responsibilities :** The first two years I was tasked with migrating Reserves Process to KNIME, automating of Reserves and Regulatory Reports, Maximum Retention Limits model development, Reserves calculation, Regulatory Reports and Reinsurance Analysis. The last year was spent with client scoring, developing a new Premium model, Premium calculation and Portfolio's risk simulation.

2020 – 2020 **NIB**, *Trainee (Risk, Part-Time)*
— **Description :** Nordic Investment Bank that promotes environmental development.
— **Responsibilities :** Visualizing the ETL process using dashboards, web scrapping processes for parameter retrieval, minor fixes and maintenance for the ETL code.

2021 – 2022 **Santander Nordics**, *Risk Data Analyst (Full-Time)*
— **Description :** Santander's Consumer Finance Division in the Nordics.
— **Responsibilities :** Data Quality assurance. I worked with a combination of SQL and SAS to guarantee the data quality for our production Risk Models. Part of my responsibilities was also to complete specific data request for the whole Risk department.

2022 – 2022 **Higo**, *Data Scientist (Full-Time)*
— **Description :** Fintech company with a platform for B2B and B2C invoice management.
— **Responsibilities :** Automating Risk calculation processes, creating dashboards for reporting, building ETL integrations, designing and maintaining the DWH. My team was also in charge of implementing and maintining HubSpot as our CRM.

Professional Development

— **Second Academic Actuarial Colloquium.** Part of the organizing committee, event dealing with several topics in actuarial mathematics, new methods implemented in the industry and Mexican regulations.

— **XXVIII Actuaries National Congress.** Attendee, event dealing with several topics in actuarial mathematics, new methods implemented in the industry and Mexican regulations.

— **KNIME Fall Summit 2018.** Attendee, courses on how to use the KNIME platform and the server, as well as the R, Python and Tableau implementations.