

# Data Scientist | R Developer

## WORK EXPERIENCE

*Researcher / Quantitative Analyst High Commission for Planning (HCP, Rabat)* January 2022 - Present

### **Head of Research Unit on Social Inequalities at the Observatory of Living Conditions of the Population**

- Development of Machine Learning model for targeting households benefiting from social programs.
- Contribution to a study on categorical inflation and changes in household purchasing power.
- Development of R package [GiniDecompLY](#) for the implementation of the Lerman Yithzaki decomposition method for simulating the impact of income sources on income inequality.
- Implementation of machine learning models for predicting consumption distribution and application of multiple imputation techniques for imputation of poverty rates in the Labor Force Survey.

*Statistician / Survey Data Analyst High Commission for Planning (HCP, Rabat)* April 2019 - December 2021

- Contribution to the execution of the National Survey on Living Standards and Sources of Household Income 2019
- Contribution to the development of the survey questionnaire, validation and cleansing of the micro data, updating of living standards key indicators.
- Contribution to the execution of the National Survey on the Impact of the Coronavirus On the Economic, Social, And Psychological Situation of Households

*Junior Statistician High Commission for Planning (HCP, Rabat)* May 2017 – March 2018

- Implementation of semi-parametric generalized models on households' survey data to analyse the effects of economic growth and inequalities on schooling dynamics in Morocco. (See [Publication](#))

***Data Scientist, Part time Freelancer*** April 2018 – Present

Providing data collection, pre-processing, exploratory analysis and modelling services to clients in the early R&D stages of developing data driven products. Projects include:

- Data description and preliminary product feasibility insights for a start-up real estate bond platform; including assessing suitability of various property transaction databases for use in initial product prototype.
- Development of statistical anomaly detection regimes and key historical insights from internet quality time-series data for use in parametric insurance products, including documenting analysis tools in an R package.

## SKILLS

## EDUCATION

**Diplôme d'Ingénieur d'Etat – Statistics (State Engineer's Degree in Statistics)**

*National Institute of Statistics and Applied Economics (INSEA, Rabat) September 2014 — July 2016*

- Specialized in statistical analysis, data modeling, and research methodologies.
- Completed an intensive program in statistics with a focus on Econometrics, Decision Theory, Quantitative Analysis
- Qualification equivalent to a master's degree in Statistics

**Bachelor degree – Mathematics and Applications** *Cadi Ayad University (FSSM, Marrakesh) September 2011 — July 2014*