


## Profile

Master's student in statistics, graduated in mathematics with training in data analysis and visualization with experience in Machine Learning.

Fascinated by the optimization achieved with data analysis and the applicability of statistics.

Interested in finding a position where I can put my knowledge in decision making into practice and acquire new skills.

## Contact information

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 PR

GitHub: <https://github.com/yguzmanc>

## Hobbies

- Volunteer at the Children International Foundation, Colombia.
- Mountain biking.
- Crafts

# Yeily Guzman Castro

Data Analyst, Master's student in statistics,

Power BI, R, Matlab, SQL, Python, Microsoft Office

## Education

### University of Puerto Rico Mayaguez Campus

Master in Mathematical Statistics | January 2022 - Present

Expected grad: 2024

### Data Analytics

Google Coursera | June 2023 - Present

### Popular Bank of Puerto Rico

Power BI advanced course | June 2023 - December 2023

### University of Cartagena

Bachelor in Mathematical | January 2017- December 2021

## Work experience

### Data analyst | Oriental Bank

Summer Internship | June 2024 - July 2024

- Practice in SQL language.
- Access and use of Amazon's Redshift and Quicksight platforms.
- Filtering and cleaning of data in the database through SQL scripts.
- Creation of a dynamic and updateable presentation on customer characterization, predicting population growth and change.

### Data analyst | Banco Popular de Puerto Rico

Internship | August - December

- Sensitive tests of predictive models
- Creation of conditions for model optimization
- Exploratory analysis and presentation of test results in Power BI

### Building a semi-supervised k-means directions algorithm for the sphere

Thesis | January 2023 - Present

- Modify the Objective Functions so that we can use the information available from the labeled data
- Propose a Lloyd algorithm that minimizes the proposed objective function
- Study the performance of the algorithm using simulated data.
- Apply the algorithm to a real data set.

## **Applied Statistics, precalculus and Calculus and instructor**

University of Puerto Rico, Mayagüez Campus | January 2022 - Present

- Teaching of precalculus II classes covering topics such as successions, trigonometry and linear algebra among others.
- Teaching elementary statistics classes covering topics such as descriptive statistics and inferential statistics, as well as the basic use of R in statistical calculations.
- Teaching of calculus course applied to administration covering topics as limits, derivatives and integration.

## **Data analyst | Banco Popular de Puerto Rico**

Summer Internship | June 2023 - July 2023

- Participation in an advanced Power BI course.
- Access and management to interconnected datasets.
- Filtering and cleaning of data in the database.
- Creation of a dynamic and real time updateable presentation about the duration of the work orders of the Real Estate division of Popular.
- Uploading of the presentation to the information platform of the division.

## **Winner of the Banco Popular Power BI contest**

Popular Bank of Puerto Rico | May 2023

- Replication of a proposed presentation plus the addition of various other advanced features.

## **Creation of a neural network for the prediction of waiting time for cardiac emergency calls**

Data mining course | January 2023 - June 2023

- Filtering and cleaning of the dataset, eliminating unnecessary variables and erroneous data.
- Design of the neural network in R language, choosing the hyperparameters, preparing the variables of interest, determining the optimal number of epochs.
- Testing the efficiency of the network with the test dataset

## **Red neural creator for handwritten character detection**

High performance course | January 2022 - June 2022

- Designed, parallel training (for optimization of this phase) and successful testing of a convolutional neural network (specialized in image processing) in Python language for the classification of handwritten characters.
- Create of a web page in html language as an interface with canvas to enter the characters to be processed.

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## **Languages**

### **Spanish:**

Native.

### **English:**

Conversational.