

# MARIANA CHAVES

## Statistician and data scientist

@ marianach16@gmail.com

+33 674280830

Nice, France

Costa Rica 16/10/1995

m-chaves.github.io

## ABOUT ME

I'm a **statistician and data scientist** with 7 years of working experience in data modeling, visualization, extraction, and transformation. Recently, I have been researching natural language processing techniques and text models in the context of fallacy detection and classification. I also worked in explainable and interpretable AI. In particular, with prototype-based interpretable neural networks and local interpretable model-agnostic explanations (LIME).

## WORK EXPERIENCE

### Research Engineer

Inria, France

2023 - Present

Research in natural language processing (NLP) focused on models and techniques that utilize argumentation and other text data derived features to identify fallacious arguments in social media and political debate contexts.

### Research internship

I3S and Inria, France

2022

Research on prototype-based interpretable neural networks, other text classification models and NLP techniques applied to the understanding of gender representation in visual media.

### Research internship

Inria and Université Côte d'Azur, France

2021

Research on model agnostic interpretability methods in the ambit of images. More specifically, improving resampling process for local interpretable model-agnostic explanations (LIME).

### Data scientist

Walmart Supply Chain Analytics USA

2018 - 2020

Directed and developed data analysis projects. Main projects included an anomaly detection system, statistical sampling design, and consumption layer design.

### Data analyst

Walmart Supply Chain Analytics USA

2017 - 2018

Data extraction, transformation, and visualization. Main projects included statistical process control techniques and KPI development.

### Data analyst

BAC Credomatic Regional Compliance Management, Costa Rica

2016

Developed money laundering detection models for five Central American countries.

## EDUCATION

### MSc Data science and artificial intelligence

Université Côte d'Azur (UniCA), France

2020 - 2022

Honors Graduate (*Mention Très Bien*)


### Bachelor in Statistics

University of Costa Rica (UCR), Costa Rica


2013 - 2017

Honors Graduate

## AWARDS

 **Highest GPA among Statistics majors for three consecutive years: 2013, 2014, 2015.**

University of Costa Rica (UCR)

 **Honorable Mention: 9th place (out of ≈33k) on National Admission Exam.**

University of Costa Rica (UCR) 2012-2013

 **Honorable Mention: 1st place (out of ≈20k) on national Admission Exam.**

Technological Institute of Costa Rica (TEC) 2012-2013

## MAIN SKILLS

Python

R

LaTeX

SQL

## LANGUAGES

English - C1

Spanish - C2 (Native)

Portuguese - B2/C1

French - B2



## PUBLICATIONS

Pierpaolo Goffredo, Mariana Chaves, Serena Villata, and Elena Cabrio. 2023. Argument-based Detection and Classification of Fallacies in Political Debates. EMNLP.