

Asael Alonzo Matamoros

Forecasting/ Mathematics/ Bayesian Data Analyst/ Probabilistic ML.



asael697site



asael697



asael-am



asael.alonzo@gmail.com



+358 417044563

EXPERIENCE

Research contract

Finnish Center of Artificial Intelligence | October 2020.

Studied the uncertainty of Cross-Validation methods when comparing probabilistic machine learning models.

Skills: R, ML, Model Comparison, Data Visualization.

Assistant Professor, Statistics Department

Universidad Nacional Autonoma de Honduras (UNAH) | October 2017 – October 2020.

Imparted Statistical Inference, Stochastic Processes, and Linear Models classes for the Department of Statistics.

Skills: Julia, STATA, Mathematics, Bayesian Statistics.

Data analyst

Instituto Hondureño de Transporte Público | January 2017 – April 2018.

Designed statistical models for estimating the public transport demands using simulation and stochastic processes.

Skills: Simulation, Probability, Mathematical Modeling, Bayesian Statistics.

Actuarial analyst

Instituto Hondureño de Seguridad Social | January 2016 – January 2017.

Wrote scripts for data cleaning and summaries for the actuarial evaluation of the total of affiliates in Honduras' primary pension system.

Skills: SQL, Data-cleaning, Big-data, Actuarial Modeling.

Statistical Consultant

Instituto Hondureño de Turismo | January 2015 – January 2016.

Designed the Sampling procedure for estimating the Touristic Expenditure in Honduras.

Skills: SPSS, Excell, forecasting, time-series.

RELEVANT PROJECTS

Bayesian order identification of ARMA models with projection predictive inference.

McLatchie Y., Alonzo Matamoros A., Vehtari A. (2022)

We proposed a novel method for automatic order selection of Bayesian ARIMA models with Projection predictive inference.

Skills: R, Model selection, Forecasting, time-series.

Uncertainty in Bayesian Leave One Out Cross-Validation model comparison.

T. Sivula, M. Magnusson, A. Alonzo Matamoros, A. Vehtari, (2022).

I studied the uncertainty of Cross-Validation methods when comparing probabilistic machine learning models.

Skills: R, Data Visualization, Bayesian Statistics, ML.

Mentor, Google Summer of Code

Bayesian ARIMA models in PyMC3 (2021).

Mentored the project of implementing Bayesian ARIMA models for probabilistic forecasting in PyMC.

Skills: Python, Github, PyMC, Time-series.

Bayesforecast: An R package for Bayesian Time series analysis.

A. Alonzo Matamoros, A. vehtari (2021).

I developed one of the first R packages for Bayesian time-series modeling and probabilistic forecasting.

Skills: C++, Developer, Stan, Time-series.

SKILLS

PROGRAMMING

• R • Python • Julia • Octave • Git
• C++ • Java • SQL • Matlab

STATISTICAL TOOLS

• SPSS • Stata • R • Excel • Stan • PyMC.
• Tidyverse • Tableau • PowerBI.

WORK

• Independent,
• Time Management,
• Decision Making,
• Continuous Improvement,
• Focus,
• Proactive,
• Friendliness.

LANGUAGES

• Spanish (Native),
• English (Professional).
• Dutch (Beginner).

EDUCATION

Ph.D. candidate Computer Science

Aalto University | Espoo, Finland.

October 2020 – October 2022.

M.Sc. Mathematics and Computation

Universidad de Cantabria | Santander, Spain.

October 2019 – October 2020.

Certification in Probability

Society of Actuaries (SOA) | online, USA.

November 2016.

B.Sc. Mathematics and Computer Science

UNAH | Francisco Morazan, Honduras

January 2010 – January 2015.

REFERENCES

Cristian Cruz, Associate Professor, UNAH.

✉ cristian.cruz@unah.edu.hn

Alicia Nieto-Reyes, Associate Professor, Universidad de Cantabria.

✉ alicia.nieto@unican.es

Fabrizio Ruggeri, Research Director at the Italian National Research Council in Milano.

✉ fabrizio@mi.imati.cnr.it