

Alexander Olza

Research Technician

■ alexanderolza@gmail.com ■ 676 637 828 • AlexOlza • Bilbao, Vizcaya Fluent English (CAE- Cambridge) ■ Native Spanish ■ Fluent Basque (EGA)

About me Passionate early stage researcher, interested in machine learning and artificial intelligence applied to health and social welfare. Looking forward to learn more about bayesian methods, trustworthy AI, causality and complex data structures.

Education

2020-2021, UPV/EHU, Zaragoza, La Laguna, La Rioja, Oviedo, UPNA Universities

Master's Degree in Mathematical Modelling and Research, Statistics and Computing.

2014-2020, UPV/EHU

University Degree in Physics.

Bachelor's degree thesis in computational astrophysics: Modelling solar evolution with MESA and EVTwin.

Experience

April 2021- Ongoing, BCAM

Research Technician. *Big Data and artificial intelligence for patient stratification: healthcare resource planning, design and implementation of interventions.* Basque Modelling Task Force (Applied Statistics).

January-June 2021, Quarizmi AdTech

External collaboration and Master's Thesis in online advertisement automation. *Predicting the conversion ratio of long-tail keywords*.

Technical Skills

General-Purpose (Structured and Object-Oriented Programming)

- ∘ Python (preferred) ∘ R ∘ Fortran (F95)
- JavaC++Bash

ML/AI/Data Science specific

Keras
Scikit-Learn
Pandas
SQL

Version control

o Git, GitHub: https://github.com/AlexOlza

Publications and conference presentations

Currently in peer-review

Development and validation of predictive models for unplanned hospitalization in the Basque Country: Analyzing the variability of non-deterministic algorithms. A Olza, E Millán, MX Rodríguez. BMC Medical Informatics and Decision-Making

March 2023, 23CNH

XXIII Congreso Nacional de Hospitales y Gestión Sanitaria.

Oral presentation: Modelo predictivo de riesgo de muerte a los 12 meses como elemento de ayuda para la identificación de personas con necesidades de cuidados paliativos

September 2022, JCE-SEB

VI Jornadas Científicas de Estudiantes de la Sociedad Española de Bioestadística (Valencia).

Oral presentation: Development and validation of prognostic models for hospitalization in the Basque Country: Analyzing the variability of non-deterministic algorithms

August 2022, EPI2022

XL Reunión Anual de la Sociedad Española de Epidemiología (San Sebastián).

- Oral presentation: Sesgo de género en los modelos predictivos para la probabilidad de ingreso hospitalario entre hombres y mujeres del País Vasco.
- First author of: Diferencias de género en los factores de riesgo de ingreso hospitalario en la población del País Vasco.

October 2021, JEDE5

V Congreso de Jóvenes Investigadores en Bioestadística y Diseño de Experimentos (Almería).

Oral presentation: Estratificación poblacional según necesidades sanitarias futuras: Comparativa de modelos predictivos para el País Vasco.

Courses and Conference attendances

Deep Learning in Electronic Health Records

December 2022, part of the Informed Clinical Decision Making using Deep Learning series. University of Glasgow (Online)

Data Mining for Clinical Databases

November 2022, part of the Informed Clinical Decision Making using Deep Learning series. University of Glasgow (Online)

CITI Human Research (Data or Specimens only)

October 2022, CITI (Collaborative Institutional Training Initiative)

Be Bayesian my friend. An introduction to Bayesian inference

September 2022, SEB

XXXV International Workshop on Statistical Modelling

July 2021, BCAM (Online)

First Bilbao Workshop on Algorithmic Fairness

June 2021, BCAM (Online)

IUMA day on Mathematical Optimization for Data Science

March 2021, IUMA- University of Zaragoza

Decisions, Data and Machine Learning

November 2020, BCAM

Recognitions

2021, **UPV/EHU**

Honors in Introduction to Data Mining

2017-2019, UPV/EHU

Honors in Electromagnetism I, Modern Physics and Solid State Physics I

2014, IES Iturrama BHI

Graduated GCE with Honors

2012, Gobierno de Navarra

Academic Program in Glebe Collegiate Institute, Ottawa. Awarded to the best 60 academic records in Navarra