

Gloria del Valle Cano

+34 635 88 68 67 · glorelvalle@gmail.com · github.com/glorelvalle

EDUCATION

- MSc Data Science** September 2021 – *Present*
Autonomous University of Madrid 60/72 cts completed
- Studying advanced methods in statistics and stochastic processes, inter alia.
 - Attending to elective courses such as Natural Language Processing, Deep Learning for Image and Video Classification, Bayesian Methods and Functional Methods in Machine Learning.
- BSc Computer Science Engineering** September 2013 – June 2021
Autonomous University of Madrid
- Studying solutions based on AI, computer security, systems administration and Big Data.
 - Working in part-time jobs as sales assistant for more than 4 years (25-35 hours per week).
 - Thesis: *Detecting hate messages on Twitter: a study based on perfles within the social network*. [Grade A].

EXPERIENCE

- Data Scientist** September 2022 – *Present*
Grupo TRC Madrid, Spain
- Design and implementation of speech-to-text and text-to-speech models in the Spanish language.
 - Participation in several AI projects from scratch, with topics such as computer vision and biometric speech recognition.
- Research Assistant** January 2022 – September 2022
Autonomous University of Madrid · OBERAXE (State Secretariat for Migration) Madrid, Spain
- Part of [REAL-UP, Combating Hate Speech Project](#) approved by the Citizens, Equality, Rights and Values Programme (CERV) of the European Commission under the Call: CERV-2021-EQUAL.
 - Design and implementation of the main hate speech algorithm for the improvement of an IT tool developed for the Spanish Government.
 - Creation of automatic processes for detecting hate speech beyond Twitter.
- R&D Tax Consultant Intern** October 2019 – March 2020
KPMG Spain Madrid, Spain
- Drafting scientific and technological descriptions of AI projects.
 - Automatizing spreadsheets for the value of claims, apportioned between the different R&D regimes.
 - Explored ways to analyse and present relevant financial information to support R&D tax credit claims.

PROJECTS

- SocialHaterBERT · Bachelor's Thesis** September 2020 – June 2021
- Main title of *Detecting hate speech messages on Twitter: a study based on social network profiles*.
 - Conducted in cooperation with the Spanish National Office Against Hate Crimes of the Spanish State Secretariat for Security (Ministry of Interior).
 - Proposal for a novel NLP approach for feature analysis based on user profiles, related social environment and generated tweets.
 - Development of a combined BERT-based model capable of analyzing features beyond those intrinsically lie in the text for the detection of hate speech on Twitter.

COURSES AND CERTIFICATES

- IBM Data Science Professional Certificate (3/10) · IBM** July 2021
- Python for Data Science · Coursera Project Network** July 2020
- Natural Language Processing · National Research University Higher School of Economics** August 2019
- Applied Text Mining in Python · University of Michigan** June 2019

PUBLICATIONS

Articles in conference proceedings

- del Valle, G. & Quijano-Sánchez, L.& Gómez, J., *Detecting Hate Messages on Twitter: A BERT-based Model for the Classification of Hate Speech in Spanish*, in Proceedings of International Congress "Hate and Discrimination in turbulent times", 2021, Málaga, Spain.

AWARDS AND ACHIEVEMENTS

Finalist at European Crime Prevention Award and Best Practice Conference (**BPC-ECPA**) October 2021

- Entry: [SocialHaterBERT: automatic detection and monitoring of hate speech on Twitter through a dichotomous approach based on textual analysis and user profiles](#).
- Winner of the internal selection process in Spain.

LANGUAGES

English: Advanced **Spanish:** Native **French:** Elementary

TECHNICAL SKILLS

Advanced knowledge: Python, C, \LaTeX , SQL, Neo4j, NLP Transformers.

Intermediate knowledge: C++, R, Lisp, Java, Swift, HTML/CSS, JavaScript, MongoDB.