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TÍTULO:

**CLASIFICACIÓN DE COMENTARIOS TÓXICOS EN REDES SOCIALES
MEDIANTE MACHINE LEARNING**

**PREVIO AL GRADO ACADÉMICO DE
MAGÍSTER EN TECNOLOGÍA DE LA INFORMACIÓN**

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ASESOR:

Mgt. Xavier Quiñonez Ku

Esmeraldas, 10 de octubre del 2023





CLASIFICACIÓN DE COMENTARIOS TÓXICOS EN REDES SOCIALES MEDIANTE MACHINE LEARNING

CLASSIFICATION OF TOXIC COMMENTS ON SOCIAL NETWORKS USING MACHINE LEARNING

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Resumen.

En esta investigación, se aborda el problema de comentarios tóxicos en redes sociales, y cómo la inteligencia artificial (IA) y el aprendizaje automático (Machine Learning) pueden ayudar. Se presenta el desarrollo de un modelo de clasificación empleando IA con técnicas de machine learning que permita identificar comentarios tóxicos en Twitter.

El clasificador planteado, elaborado en Python, se estableció con 7 diferentes algoritmos a los que se les empleó enfoques o estrategias para la clasificación de etiquetas múltiples, preprocesamiento, limpieza y visualización de datos. Este modelo fue entrenado con un total de 159571 comentarios del conjunto de datos del repositorio Kaggle denominado Jigsaw, el cual tiene los comentarios clasificados con diversas características. Posteriormente del entrenamiento, evaluación y comparación del modelo creado se consiguió como resultado un clasificador capaz de identificar palabras o comentarios tóxicos y ofensivos cuya precisión fue del 92.16%

Palabras Clave: análisis de los sentimientos, clasificación de texto, comentarios tóxicos, machine learning, tweets, Twitter.

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Abstract.

This research addresses the problem of toxic comments in social networks, and how artificial intelligence (AI) and machine learning (Machine Learning) can help. It presents the development of a classification model using AI with machine learning techniques to identify toxic comments on Twitter.

The proposed classifier, developed in Python, was established with 7 different algorithms using approaches or strategies for multi-label classification, preprocessing, cleaning and data visualization. This model was trained with a total of 159571 comments from the Kaggle repository dataset called Jigsaw, which has the comments classified with various features. After the training, evaluation and comparison of the model created, the result was a classifier capable of identifying toxic and offensive words or comments with an accuracy of 92.16%.

Keywords: sentiment analysis; text classification; toxic comments; machine learning; tweets; twitter.

AUTOR DE CORRESPONDENCIA: Xavier Quiñonez Ku

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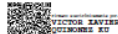
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Cordialmente,



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