ABSTRACT

DETEKSI KALIMAT TOXIC DALAM POSTINGAN MEDIA SOSIAL BERBAHASA INDONESIA MENGGUNAKAN ALGORITMA DECISION TREE

By: ALVINDO 1911010042

Bandar Lampung, Telp 098676086001

Teknik Informatika, Institut Informatika dan Bisnis Darmajaya, Bandar

Lampung

E-Mail: doyourbae9@gmail.com

Social media has become the primary platform for interaction, sharing information, and communication. However, this development has also brought negative consequences, particularly in the form of cyberbullying. Considering the number of social media users, especially on *Instagram*, which has reached 89.15 million users, surveys indicate that *Instagram* plays a significant role in *cyberbullying* cases, with 42% of users having been victims. Cyberbullying involves the use of toxic language aimed at demeaning, insulting, or harming individuals or groups, with the intention of hurting, humiliating, threatening, or lowering someone's self-esteem online. To address this issue, this research utilizes the Decision Tree Algorithm in Machine Learning to identify toxic language on social media. The research process begins with the collection of 8,734 comments, followed by data cleaning, labeling, and data division into training data (80%) and test data (20%). Subsequently, the developed model undergoes training and evaluation. The research results show that this model has an accuracy of 62.38%, although there is room for performance improvement. Nevertheless, the model retains the ability to predict and classify comment toxicity.

Key Words: Social Media, *Instagram*, Cyberbullying, Toxic Sentences, Decision Tree Algorithm, Machine Learning