

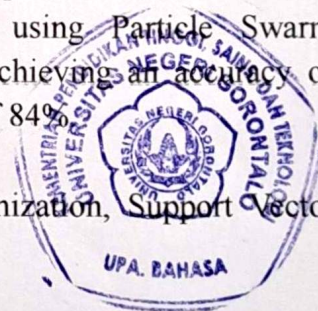
ABSTRACT

PUTU AYU INDAH NAZWA USIA, 2026. IMPLEMENTATION OF GLOVE WORD EMBEDDING IN SUPPORT VECTOR MACHINE WITH PARTICLE SWARM OPTIMIZATION FOR SENTIMENT ANALYSIS OF INDODAX USER REVIEWS ON X. UNDERGRADUATE THESIS. Gorontalo. Study Program of Statistics, Department of Mathematics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Gorontalo.

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The development of digital technology in the financial sector has transformed public investment patterns, marked by the emergence of cryptocurrencies as digital assets. This has led to the growth of various crypto asset trading platforms, including Indodax, recognized as the largest and oldest platform in Indonesia. As the number of platform users increases, social media platform X has become a primary medium for users to openly express both support and criticism. This condition generates abundant public opinion data, making it highly relevant for sentiment analysis to understand user perceptions of Indodax. Support Vector Machine (SVM) is an effective method for sentiment classification; however, its performance depends heavily on feature representation and hyperparameter selection. Therefore, this study aims to implement GloVe word embedding combined with Particle Swarm Optimization (PSO) to improve the performance of SVM in sentiment analysis of Indodax user reviews on social media X. The study stages include data collection via scraping, text preprocessing, GloVe word embeddings, data splitting at an 80:20 ratio, parameter optimization using PSO, and classification using SVM. The findings show that the application of GloVe word embedding in Support Vector Machine optimized using Particle Swarm Optimization yields good classification performance, achieving an accuracy of 82%, precision of 85%, recall of 82%, and an F1-score of 84%.

Keywords: Sentiment Analysis, Particle Swarm Optimization, Support Vector Machine, GloVe Word Embedding.



LEMBAR PENGESAHAN

Skripsi yang berjudul "**IMPLEMENTASI WORD EMBEDDING GLOVE PADA
SUPPORT VECTOR MACHINE DENGAN PARTICLE SWARM OPTIMIZATION
UNTUK ANALISIS SENTIMEN ULASAN PENGGUNA INDODAX DI X**"

Oleh

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Program Studi Statistika

Fakultas Matematika dan Ilmu Pengetahuan Alam

Telah dipertahankan di depan pembimbing dan dewan penguji

Hari, tanggal : Senin, 13 April 2026

Waktu : 09.00-10.00 WITA

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