



**A SENTIMENT POLARITY ANALYSIS OF INTERNATIONAL  
ENGLISH-SPEAKING FANS' REACTIONS TO 'ONE PIECE'  
LIVE-ACTION ADAPTATION**

**THESIS REPORT**

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UNIVERSITAS  
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**INFORMATICS STUDY PROGRAM FACULTY OF  
COMPUTER SCIENCE  
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JAKARTA  
2024**



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**Submitted as a requirement for obtaining a bachelor's degree**

**INFORMATICS STUDY PROGRAM FACULTY OF  
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I hereby declare that this Thesis Report is my own work and not plagiarized. I have accurately stated all sources, both quoted and referred to. If it is discovered that there is plagiarism in my research proposal, I am prepared to face the academic sanctions applicable at Mercu Buana University.

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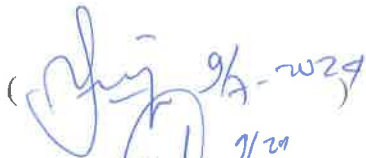



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2. Dr. Bambang Jokonowo, S.Si., M.T.I as the Dean of the Faculty of Computer Science
3. Dr. Hadi Santoso, S.Kom., M.Kom. as the Head of the Information Technology Study Program
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6. Both parents who have provided support and consistently offered prayers to the author.
7. All parties who have given motivation and beneficial knowledge to the author.

Finally, the writer hopes that the Almighty God will graciously repay all the kindness shown by everyone who has assisted. May this Thesis Report bring benefits to the advancement of knowledge.

Jakarta, 1 December 2023



Erick Kristianto

**DECLARATION PAGE OF APPROVAL FOR PUBLICATION OF  
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## ABSTRACT

### Abstract:

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Thesis Report Title : A Sentiment Polarity Analysis Of International English-Speaking Fans' Reactions To 'One Piece' Live-Action Adaptation  
Advisor Lecturer : Dr. Afiyati, S.Si., MT.

With the increasing popularity of live-action adaptations of beloved anime series, understanding fan sentiments is essential. This research employs sentiment analysis to explore the perceptions of international English-speaking fans regarding the "One Piece" live-action adaptation. Utilizing the Python Reddit API Wrapper (PRAW) and machine learning techniques, we analyze Reddit discussions, employing Support Vector Machines (SVM) and Random Forest algorithms for sentiment classification. Our findings reveal that the majority of fan comments express positive sentiments towards the "One Piece" live-action adaptation, with 8790 instances of positive sentiment compared to 5498 instances of negative sentiment. The SVM model using SGDClassifier emerged as the top performer, demonstrating the highest precision and Cohen's Kappa score among the evaluated models.

This study contributes to Information Technology and media studies by offering insights into fan sentiments and the accuracy of sentiment analysis methods. It informs decision-making for producers, addresses real-world implications, and bridges gaps for stakeholders. Additionally, it enhances academic understanding of sentiment dynamics within fan communities, particularly concerning live-action anime adaptations.

### Keywords:

Sentiment Analysis, One Piece, Live-Action Adaptation, Machine Learning, SVM, Random Forest



## ABSTRAK

### Abstrak:

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Dengan semakin populernya adaptasi live-action dari serial anime yang dicintai, memahami sentimen penggemar menjadi sangat penting. Penelitian ini menggunakan analisis sentimen untuk mengeksplorasi persepsi penggemar internasional berbahasa Inggris terhadap adaptasi live-action "One Piece". Dengan memanfaatkan Python Reddit API Wrapper (PRAW) dan teknik machine learning, kami menganalisis diskusi di Reddit, menggunakan algoritma Support Vector Machines (SVM) dan Random Forest untuk klasifikasi sentimen.

Temuan kami mengungkapkan bahwa mayoritas komentar penggemar menyampaikan sentimen positif terhadap adaptasi live-action "One Piece", dengan 8790 komentar bernada positif dibandingkan dengan 5498 komentar bernada negatif. Model SVM dengan SGDClassifier muncul sebagai yang berkinerja terbaik, menunjukkan presisi dan skor Cohen's Kappa tertinggi di antara model yang dievaluasi.

Studi ini berkontribusi pada bidang Teknologi Informasi dan studi media dengan menawarkan wawasan tentang sentimen penggemar dan akurasi metode analisis sentimen. Penelitian ini memberikan informasi untuk pengambilan keputusan bagi produser, menangani implikasi dunia nyata, dan menjembatani kesenjangan bagi pemangku kepentingan. Selain itu, penelitian ini meningkatkan pemahaman akademis tentang dinamika sentimen dalam komunitas penggemar, khususnya terkait adaptasi live-action anime.

### Kata Kunci:

Analisis Sentimen, One Piece, Adaptasi Live-Action, Machine Learning, SVM, Random Forest



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