

ABSTRAK

Pesatnya perkembangan teknologi telah meningkatkan jumlah teks digital, termasuk buku pelajaran. Buku sejarah SMA sering kali memiliki narasi panjang dan kompleks sehingga sulit dipahami siswa. Oleh karena itu, dibutuhkan metode peringkasan otomatis untuk menyederhanakan isi materi agar lebih mudah dipahami. Penelitian ini mengimplementasikan metode Latent Semantic Analysis (LSA) dengan pendekatan *Term Frequency-Inverse Document Frequency* (TF-IDF) dan Singular Value Decomposition (SVD) untuk meringkas teks sejarah pada buku Sejarah SMA kelas XI. Proses meliputi tahap preprocessing, pembobotan TF-IDF, reduksi dimensi menggunakan SVD, dan pemilihan kalimat penting berdasarkan skor. Sistem diuji pada Bab 4 buku sejarah dengan tiga skenario compression rate, yaitu 50%, 30%, dan 10%. Evaluasi dilakukan dengan membandingkan hasil ringkasan sistem terhadap ringkasan buatan GPT. Compression rate 10% menghasilkan rata-rata akurasi tertinggi, yaitu sebesar 0.9000, menunjukkan bahwa metode LSA efektif untuk merangkum informasi inti secara ringkas namun tetap representatif. LSA dapat digunakan secara optimal dalam merangkum dokumen pendidikan seperti buku sejarah. Ringkasan yang dihasilkan mampu menyampaikan inti informasi dengan efisien, khususnya pada tingkat kompresi rendah.

Kata kunci: peringkasan teks, LSA, TF-IDF, SVD, sejarah, compression rate, SMA.

ABSTRACT

The rapid advancement of technology has led to an increase in digital texts, including textbooks. High school history books often contain lengthy and complex narratives, making them difficult for students to understand. Therefore, an automatic text summarization method is needed to simplify the content for better comprehension. This study implements the Latent Semantic Analysis (LSA) method using a Term Frequency-Inverse Document Frequency (TF-IDF) approach and Singular Value Decomposition (SVD) to summarize historical texts from the 11th-grade high school history textbook. The process involves preprocessing, TF-IDF weighting, dimensionality reduction using SVD, and selecting key sentences based on scores. The system was tested on Chapter 4 of the history textbook using three compression rate scenarios: 50%, 30%, and 10%. Evaluation was conducted by comparing the system-generated summaries with summaries generated by GPT. The 10% compression rate yielded the highest accuracy, reaching 0.9000, indicating that the LSA method is effective in producing concise yet representative summaries of core information. LSA can be optimally utilized in summarizing educational documents such as history textbooks. The resulting summaries effectively convey essential information, particularly at low compression rates.

Keywords: text summarization, LSA, TF-IDF, SVD, history, compression rate, high school.