MINING BLOGS FOR EMOTION -DRIVEN ARGUMENTATION USING NLP TECHNIQUES

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In the digital age, blogs have become a pivotal medium for sharing personal experiences, emotions, and opinions, offering rich insights into human expression and communication. This project leverages advanced Natural Language Processing (NLP) techniques to explore the interplay between emotional tones and argumentative strategies in blog content. Utilizing tools such as Latent Dirichlet Allocation (LDA) for topic modeling, GoEmotions for detailed emotion detection, and BERT for argument mining.

The system extracts meaningful insights about how emotions shape persuasive and argumentative content. These findings have significant applications in analyzing online discourse, enhancing communication strategies, and designing emotion-aware content moderation tools.

The proposed system integrates multiple NLP models into a unified framework, overcoming the limitations of isolated applications. Through an interactive Flask-based web interface, users can upload blog content, analyze it for topics, emotions, and arguments, and visualize the results comprehensively. This research not only contributes to computational linguistics and social media analytics but also provides actionable insights for developing emotion- driven applications and improving digital communication.

Keywords: *Blog, NLP, LDA, argumentation, GoEmotions, BERT, flask, emotion-driven, social media analytics.*