**TEXT SUMMARIZATION FOR WEATHER FORECASTING USING MACHINE LEARNING**

**1. Learning to Summarize Time Series Data (Sowdaboina, P. K. V., Chakraborti, S., & Sripada, S., 2014)**

<https://link.springer.com/chapter/10.1007/978-3-642-54906-9_42>

**2. Summarization of Text and Image Captioning in Information Retrieval Using Deep Learning Techniques (Mahalakshmi, P., & Fatima, N. S., 2022)**

<https://ieeexplore.ieee.org/abstract/document/9709290/>

**3. Automatic Amharic Text Summarization Using NLP Parser (Mekuria, G. T., & Jagtap, A. S., 2017)**

<https://www.researchgate.net/profile/Aniket-Jagtap/publication/323590604_Automatic_Amharic_Text_Summarization_using_NLP_Parser/links/5beeee6492851c6b27c48e46/Automatic-Amharic-Text-Summarization-using-NLP-Parser.pdf>

**4. A Survey of Recent Techniques in Automatic Text Summarization (Dhanya, P. M., Sreekumar, A., & Jathavedan, M., 2018)**

<https://www.academia.edu/download/68679605/IJCET_09_02_007.pdf>

**5. Weather Forecasting Using Machine Learning Algorithm (Singh, N., Chaturvedi, S., & Akhter, S., 2019)**

<https://ieeexplore.ieee.org/abstract/document/8938211/>

**6. Weather Forecasting Using Deep Learning Techniques (Salman, A. G., Kanigoro, B., & Heryadi, Y., 2015)**

<https://ieeexplore.ieee.org/abstract/document/7415154/>

**7. Machine Learning Applied to Weather Forecasting (Holmstrom, M., Liu, D., & Vo, C., 2016)**

<http://cs229.stanford.edu/proj2016/report/HolmstromLiuVo-MachineLearningAppliedToWeatherForecasting-report.pdf>

**8. Predicting Solar Generation from Weather Forecasts Using Machine Learning (Sharma, N., Sharma, P., Irwin, D., & Shenoy, P., 2011)**

<https://ieeexplore.ieee.org/abstract/document/6102379/>

**9. Predicting Weather Forecast Uncertainty with Machine Learning (Scher, S., & Messori, G., 2018)**

<https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/qj.3410>

**10. Machine Learning for Applied Weather Prediction (Haupt, S. E., Cowie, J., Linden, S., McCandless, T., Kosovic, B., & Alessandrini, S., 2018)**

<https://ieeexplore.ieee.org/abstract/document/8588666/>

**How our project is different**

Our project differentiates itself from previous studies by adopting a comprehensive methodology that not only simplifies intricate meteorological data but also prioritizes accessibility, public safety, weather literacy, and cutting-edge machine learning methodologies. In contrast to numerous extant articles that predominantly cater to meteorological specialists, our initiative aims to enhance the accessibility of weather information for persons from all backgrounds, emphasizing inclusion as a key priority. In addition, our summarizing tool beyond mere data display since it is specifically designed to provide weather summaries that are both clear and succinct, effectively communicating the importance of severe weather conditions and ultimately improving public safety. Furthermore, our research integrates educational components by offering comprehensive explanations of weather patterns, forecasts, and climate science, so fostering enhanced weather literacy. In this study, we investigate advanced machine learning approaches, such as extractive and abstractive summarizing techniques, as well as transfer learning from pre-trained language models. The objective is to enhance the precision and efficacy of weather summaries. The project distinguishes itself through its holistic approach, which provides a transformative viewpoint on weather forecasting that yields advantages for a wider range of individuals and contributes to the progression of the discipline.