**Paper Summary by (1907121)**

[Chat Web App using Blockchain:](https://ieeexplore.ieee.org/document/10141385/references) The paper suggests that instead of storing all the information in one place, like a big warehouse, blockchain spreads it out across lots of different places, like hiding puzzle pieces in different rooms. This makes it really tricky for hackers to sneak in and mess with the data because they'd have to find and change all the pieces in all the rooms, which is nearly impossible. Blockchain is like a special kind of lock that keeps data safe and unchangeable. Once something is added to the blockchain, it's there forever and everyone can see it. This transparency makes it harder for someone to tamper with the information without being noticed. By using blockchain in social media and chat apps, we can make them safer from things like hacking or people trying to steal or manipulate data. This means users can feel more confident that their personal information and conversations are secure and won't be messed with.

[Diabetes Mellitus Prediction using Supervised Machine Learning Techniques:](https://ieeexplore.ieee.org/document/10141734) The paper discusses the complexities of diabetes, a common metabolic disorder that leads to abnormal blood glucose levels. It covers various types of diabetes, including type 1, type 2, and gestational diabetes, and highlights the increasing prevalence of this condition worldwide. Diabetes can cause severe health complications, such as blindness, kidney failure, and heart disease. The study focuses on the importance of early detection and uses machine learning techniques like Logistic Regression and Random Forest for predictive analysis. The results show that Random Forest achieved the highest accuracy of 99.03%, demonstrating its potential in predicting the occurrence of the disease. The paper was presented at the 2023 International Conference on Advancement in Computation & Computer Technologies and emphasizes the importance of leveraging machine learning for proactive healthcare intervention, which could potentially save lives.

[BanglaGPT: A Generative Pretrained Transformer-Based Model for Bangla Language:](https://ieeexplore.ieee.org/document/10303383) The paper introduces BanglaGPT, which is a generative pretrained transformer (GPT) model specifically designed for the Bengali language. The advancement of pre-trained language models has significantly improved text generation, but low-resource languages such as Bangla often rely on multilingual frameworks that may not provide optimal results. To bridge this gap, BanglaGPT uses a large dataset called BanglaCLM, consisting of 26.24 GB of Bangla text collected from various sources. The model is trained from scratch using Byte-Pair Encoding (BPE) for tokenization and causal language modeling (CLM) objective. Experimental results demonstrate BanglaGPT outperforming multilingual models and LSTM-based sequence-to-sequence models, achieving a perplexity score of 2.86 on the test set. The paper concludes by suggesting that BanglaGPT could be used for future tasks such as text summarization and question answering, as well as the possibility of training more advanced models like GPT-3 with additional resources.