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BloombergGPT: Revolutionizing Finance with Large Language Models

Manish Kumar Keshri
Data Science from the University of Minnesota, Twin Cities, USA

Abstract: *BloombergGPT represents a significant advancement in applying Large Language Models to the financial domain. This article examines how this specialized variant leverages natural language processing capabilities to transform financial operations across multiple applications. Developed by Bloomberg, this decoder-only language model is trained on an extensive corpus of financial texts and general-purpose datasets, enabling superior performance on finance-specific tasks while maintaining competence in general NLP benchmarks. It explores its diverse applications, including economic news summarization, market analysis, research report generation, virtual assistance, fraud detection, and trading strategy optimization. While offering substantial benefits in efficiency, accuracy, and cost reduction, BloombergGPT also faces important challenges related to data quality, hallucinations, regulatory compliance, and explainability that must be addressed for responsible implementation in the precision-critical financial industry*

Keywords: Large Language Models, Financial Technology, Natural Language Processing, Domain-Specific AI, Automated Financial Analysis

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