BQuant Enterprise: Textual Analytics

Harness the power of news and textual datasets along with Bloomberg-trained NLP models to develop original insights for your alpha generation workflows

Textual datasets can be notoriously difficult to handle, requiring terabytes of storage for historical data and large-scale distributed computing to produce analyses in a timely fashion. Analysis of textual data for financial insights intersects two separately challenging areas of research: natural language understanding and financial signal generation.

The Textual Analytics Add-on package has been developed to help solve the challenges of analyzing news and other textual content. The package helps with workflows involving custom classifications, sentiment scores, and summarizations. Textual Analytics contains more than 15 years of unique Bloomberg news sources, complete with entity and topic metadata, Bloomberg-trained language models, and BQuant Enterprise's infrastructure for distributed compute (including GPUs) and large data storage as a turnkey solution.

BQuant Enterprise Textual Analytics Add-on offers two levels of updates:

- Textual Analytics Daily (Tier 1)
- Textual Analytics Intraday (Tier 2)

Tier 2 provides news and metadata updates every 2 hours, with increasing update cadence over 2024-25. Both packages contain the following:

News and Textual corpus

News corpus and Company Transcript historical archive going back to 2007 available in the public cloud and at your fingertips

- Bloomberg news sources available, going back to 2007 across multiple languages.
- Headlines and full body of news articles available with point-in-time timestamps to support backtesting workflows.
- Sentiment scores and high-level news story analytics information.
- Bloomberg NLP APIs to easily search for news by entities and topics through time.
- Company filings historical archive (Q2 2024).

News Tagging and Entity Recognition

- Bloomberg's extensive news taxonomy includes more than 10,000 tags and is up to 11 levels deep in places, allowing for very granular categorization.
- Each item is tagged by relevant named entity, mapped to a Bloomberg ticker where available, relevant topics, and included with sentiment scores and high-level readership information.
- Sentiment scores provided with confidence intervals for corporate entities.
- FX and Commodity sentiment models (coming in 2024).
- Bloomberg Terminal users can type NIF <GO> to explore our news taxonomy.

Bloomberg

Bloombergtrained Language Models For more than 15 years, Bloomberg has been at the cutting-edge of research and development of language models in the financial domain. BQuant Enterprise Textual Analytics makes these models available for the first time to BQuant Enterprise customers to support a wide range of use cases:

Bloomberg BERT:

- Built and pre-trained from scratch on Bloomberg's finance-specific data, as opposed to a pretrained BERT model that is fine-tuned on financial data.
- Achieves state-of-the-art performance on several downstream tasks. For example, Bloomberg BERT outperforms open-source BERT models by 10% when both are trained on the same binary classification task (Benchmarked in Q2 2023).

Sentence Representation:

- Multi-token representation, which can be used for clustering of stories and entities.
- The model runs on standard libraries, such as PyTorch and sklearn, to support fine-tuning.

T5 Encode-Decoder Model:

• Transformer-based LLM trained on the full Bloomberg News Data Corpus for Text Summarization tasks.

Example NLP Use Cases:

- There are many use cases including: ESG sentiment, probability of default models, proprietary risk models, sentiment of earnings call transcripts, social media analytics, company relationships graph analysis, statistical arbitrage and news event arbitrage, estimation of supply and demand imbalance, and optimizing trade execution.
- Fine tuning on language models inside the BQuant Sandbox on historical Bloomberg News datasets and your own internal datasets.

BQuant Enterprise Solutions

BQuant Enterprise is a cloud-based analytics solution specifically designed for quantitative analysts and data scientists in the financial industry. BQuant Enterprise provides broad programmatic access to Bloomberg's comprehensive range of high-quality industry-leading financial datasets and services via powerful APIs, along with quant tools.

Textual Analytics is an add-on to BQuant Enterprise's base packages. Additional add-ons include:

- **Equity Signal Lab:** Equity signal research, advanced backtesting, and portfolio construction.
- **Intraday Analytics:** Comprehensive access to historical, multi-asset class intraday datasets and pre-built quant analytics libraries.
- **Derived Results:** Export of model results from the BQuant Sandbox.

For additional information, press the <HELP> key twice on the Bloomberg Terminal*.

The data included in these materials are for illustrative purposes only. @2023 Bloomberg 2360837 0423

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