# EDGAR-CRAWLER: Automating Financial Data Harvesting and Preprocessing for NLP

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## What's the problem?



Most NLP datasets are often behind paywalls. EDGAR, a notable free source, hosts comprehensive annual reports (10-K reports) from US publicly traded companies. However, these reports, stored as complex PDF/HTML/TXT files with numerous sections and pages, pose challenges for researchers. Extracting specific information becomes laborious, requiring downloading a vast number of reports for manual text extraction. This is an **impractical and time-consuming** process.



#### **Our Solution:**

EDGAR-CRAWLER, a free, open-source package that downloads and extracts information from annual reports (EDGAR 10-K documents) into an easy-to-manage JSON format.

# Our software, EDGAR-CRAWLER, is made up of two modules: 000 1. python edgar\_crawler.py

2. python extract\_items.py

- 1. Responsible for crawling and downloading financial reports. Supports multiple input arguments.
- 2. Cleans and extracts the text of all or particular items from downloaded 10-K reports and saves them as JSON files.

### Scientific Contributions in ML & NLP:

- Trusted by the community (160+ stars on Github!)
- Multiple citations in relevant literature.





### **Future Work:**

Looking for contributors for these, send us a message if interested .... "



Support more types of documents like quarterly reports.



Create a GUI for more user-friendly configuration.



Deploy a live demo to increase accessibility.



