

# Report Cruncher

finance made easy



by the [AIDATATOOLS](#) Team

# Meet the Team

People from  
6 countries  
5 time zones



**Jason Chuang**



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# Problem

Unlike big-shot investor firms with armies of analysts, many **retail investors lack the resources, time, and financial education** needed to perform comprehensive analysis of financial reports. Limited access to financial information and a lack of expertise can lead to poor returns and missed opportunities.

# Solution

**Report Cruncher simplifies financial reports** for retail investors, empowering them to make informed investment decisions and achieve success in the stock market.

# Simplifying Financial Data

Financial reports can be complex and challenging for the average individual to comprehend. Our financial software provides a simple and effective solution by condensing this information into a clear, understandable style. Our program simplifies financial data, making it more accessible to small business owners, investors, and anyone who needs to interact with financial information but does not have specialist financial expertise.



Historical Results

FINANCIAL STATEMENTS

	2012	2013	2014	2015	2016	2017
<b>Income Statement</b>						
Revenue	102,007	118,086	131,345	142,341	150,772	158,311
Cost of Goods Sold (COGS)	39,023	48,004	49,123	52,654	56,710	58,575
<b>Gross Profit</b>	<b>62,984</b>	<b>70,082</b>	<b>82,222</b>	<b>89,687</b>	<b>94,062</b>	<b>99,736</b>
<b>Expenses</b>						
Salaries and Benefits	26,427	22,658	23,872	23,002	25,245	26,913
Rent and Overhead	10,963	10,125	10,087	11,020	11,412	10,000
Depreciation & Amortization	19,500	18,150	17,205	16,544	16,080	15,008
Interest	2,500	2,500	1,500	1,500	1,500	1,500
<b>Total Expenses</b>	<b>59,390</b>	<b>53,433</b>	<b>52,664</b>	<b>52,066</b>	<b>54,237</b>	<b>53,421</b>
<b>Earnings Before Tax</b>	<b>3,594</b>	<b>16,649</b>	<b>29,558</b>	<b>37,622</b>	<b>39,825</b>	<b>46,314</b>
Taxes	1,120	4,858	8,483	10,908	11,538	12,968
<b>Net Earnings</b>	<b>2,474</b>	<b>11,791</b>	<b>21,075</b>	<b>26,713</b>	<b>28,227</b>	<b>33,346</b>
<b>Balance Sheet</b>						
<b>Assets</b>						
Cash	167,971	181,210	183,715	211,069	239,550	272,530
Accounts Receivable	5,100	5,904	6,567	7,117	7,539	7,807
Inventory	7,805	9,601	9,825	10,531	11,342	11,715
Property & Equipment	45,500	42,350	40,145	38,602	37,521	37,513
<b>Total Assets</b>	<b>226,376</b>	<b>239,065</b>	<b>240,252</b>	<b>267,319</b>	<b>295,951</b>	<b>329,564</b>
<b>Liabilities</b>						
Accounts Payable	3,902	4,800	4,912	5,265	5,671	5,938
Debt	50,000	50,000	30,000	30,000	30,000	30,000
<b>Total Liabilities</b>	<b>53,902</b>	<b>54,800</b>	<b>34,912</b>	<b>35,265</b>	<b>35,671</b>	<b>35,938</b>
<b>Shareholder's Equity</b>						
Equity Capital	170,000	170,000	170,000	170,000	170,000	170,000
Retained Earnings	2,474	14,265	35,340	62,053	90,280	123,627
<b>Shareholder's Equity</b>	<b>172,474</b>	<b>184,265</b>	<b>205,340</b>	<b>232,053</b>	<b>260,280</b>	<b>293,627</b>
<b>Total Liabilities &amp; Shareholder's Equity</b>	<b>226,376</b>	<b>239,065</b>	<b>240,252</b>	<b>267,319</b>	<b>295,951</b>	<b>329,564</b>
<b>Cash Flow Statement</b>						
<b>Operating Cash Flow</b>						
Net Earnings	2,474	11,791	21,075	26,713	28,227	33,346
Plus: Depreciation & Amortization	19,500	18,150	17,205	16,544	16,080	15,008
Less: Changes in Working Capital	9,003	1,702	775	903	827	375
<b>Cash from Operations</b>	<b>12,971</b>	<b>28,239</b>	<b>37,505</b>	<b>42,354</b>	<b>43,480</b>	<b>47,980</b>
<b>Investing Cash Flow</b>						
Investments in Property & Equipment	15,000	15,000	15,000	15,000	15,000	15,000
<b>Cash from Investing</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>
<b>Financing Cash Flow</b>						
Issuance (repayment) of debt	-	-	(20,000)	-	-	-
Issuance (repayment) of equity	170,000	-	-	-	-	-
<b>Cash from Financing</b>	<b>170,000</b>	<b>-</b>	<b>(20,000)</b>	<b>-</b>	<b>-</b>	<b>-</b>
Net Increase (decrease) in Cash	167,971	13,239	2,505	27,354	28,480	33,980
Opening Cash Balance	-	167,971	181,210	183,715	211,069	239,550
<b>Closing Cash Balance</b>	<b>167,971</b>	<b>181,210</b>	<b>183,715</b>	<b>211,069</b>	<b>239,550</b>	<b>272,530</b>

# Demo

Feature:

Summarize financial statements

Question & Answer

# Technologies we used

## Backend:

Programming Language: Python

Web Server: gunicorn

Framework: Flask

## Frontend:

Programming Language: TypeScript

Library: React

Fine-tune GPT-3 curie model,

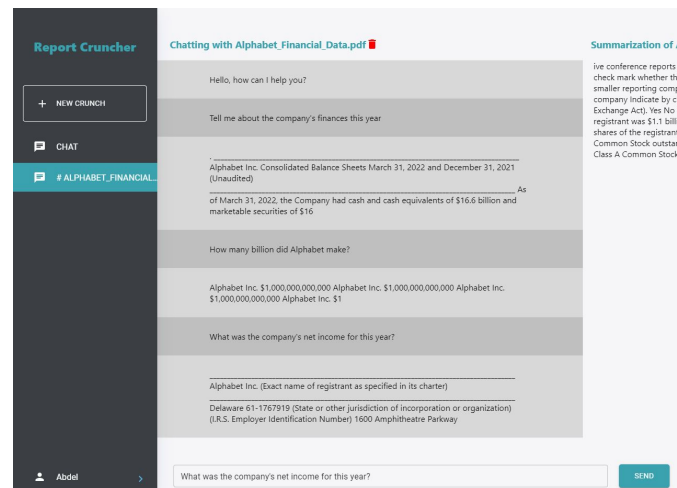
Using ECTSum dataset (highest compression ratio so far)

Cost: \$32.46, training time: 30 min.

With 1684 training, 252 validation

# Making Money by Offering Subscription-Based Model

- Report Cruncher will be offered as a subscription-based service;
- To attract new users and showcase the value of our platform, we will offer a few free Report Crunches before requiring a subscription to access additional reports;
- Our marketing strategy will include targeted advertising and promotional campaigns through social media, search engines, and other channels to reach our target audience of retail investors;
- We will also explore partnerships with financial advisors, brokerages, and other financial service providers to reach a wider audience and build credibility.

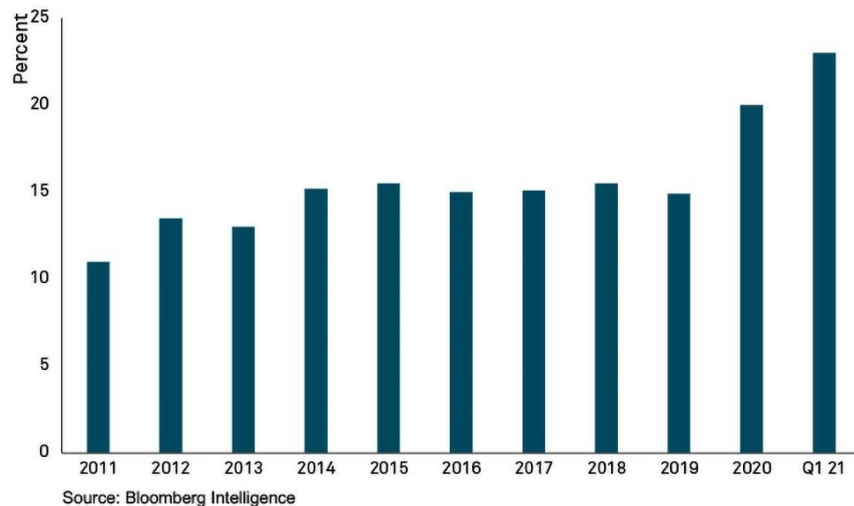




# Target audience

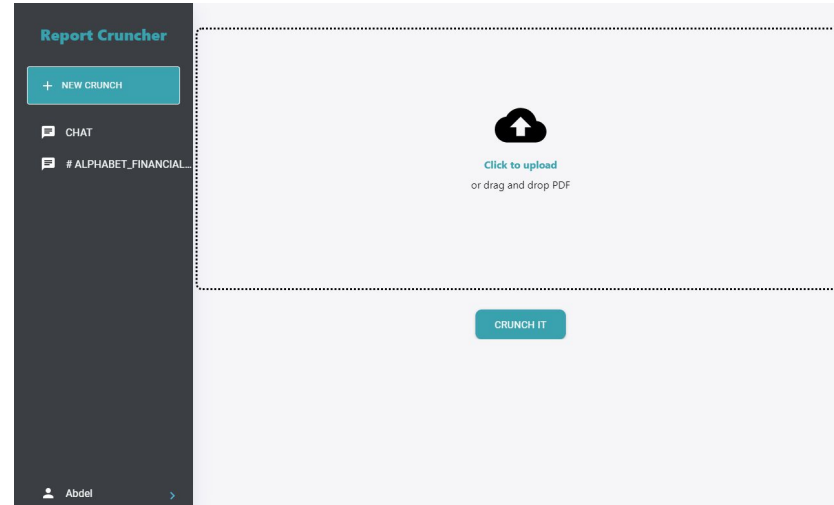
**Retail investors** are nonprofessional investors who use their own money to buy and sell securities:

- accounted for more than 20% of all stock market shares traded\*
- the total annual volume of trades was approximately \$420 trillion and more than \$84 trillion is accounted on retail investors\*



# What's next

- Chained prompts are a series of prompts that build on each other to produce a final summary
- After sufficient funding, fine-tune Davinci model to get better results





**Thank You**

# Setting Ourselves Apart with

- More User-Friendly Results
- Specialization in Financial Reports
- Opportunity to Ask Questions



Seeking Alpha<sup>α</sup>

# Financial Projections

Hosting costs: \$50/month

Cost per Request: It depends on # of tokens

# Crunching the training data

```
jasontgi@Jason-laptop2: ~/wc x  jasontgi@Jason-laptop2: ~/wc x  jasontgi@Jason-laptop2: ~/w x  +  v  -  □  X
sion) (1.24.2)
Requirement already satisfied: requests in /usr/lib/python3/dist-packages (from torchvision) (2.25.1)
Requirement already satisfied: pillow!=8.3.*,>=5.3.0 in /home/jasontgi/.local/lib/python3.10/site-packages (from torchvision) (9.4.0)
Installing collected packages: torchaudio
Successfully installed torchaudio-0.13.1+cpu
jasontgi@Jason-laptop2:~/workspace/ECTSum-GPT3(main)$ python3 prepare_data_gpt3_bert.py
Downloading (...)nce_bert_config.json: 100%|██████████| 53.0/53.0 [00:00<00:00, 51.2kB/s]Downloading (...)cial_to
kens_map.json: 100%|██████████| 112/112 [00:00<00:00, 79.0kB/s]Downloading (...)821d1/tokenizer.json: 100%|███
██████| 466k/466k [00:01<00:00, 322kB/s]Downloading (...)okenizer_config.json: 100%|██████████| 399/399 [00:00
<00:00, 349kB/s]Downloading (...)8d01e821d1/vocab.txt: 100%|██████████| 232k/232k [00:00<00:00, 264kB/s]Downlo
ading (...)1e821d1/modules.json: 100%|██████████| 229/229 [00:00<00:00, 149kB/s]

Preparing train data..

AAN_q1_2021.txt - Original Lines: 63      Total Lines: 28      Summary Lines: 3
AAP_q1_2021.txt - Original Lines: 169     Total Lines: 37      Summary Lines: 4
AAP_q2_2021.txt - Original Lines: 134     Total Lines: 33      Summary Lines: 5
AAP_q3_2021.txt - Original Lines: 150     Total Lines: 42      Summary Lines: 5
AAT_q1_2020.txt - Original Lines: 78      Total Lines: 33      Summary Lines: 1
AAT_q2_2020.txt - Original Lines: 91      Total Lines: 42      Summary Lines: 1
AAT_q2_2021.txt - Original Lines: 93      Total Lines: 51      Summary Lines: 1
AAT_q3_2020.txt - Original Lines: 78      Total Lines: 36      Summary Lines: 2
AAT_q3_2021.txt - Original Lines: 84      Total Lines: 38      Summary Lines: 3
```

# Compatible with PDFs, Excel Sheets, and More



# Adaptable Tool for a Global Market





# **Precise and Effective Approach to Summarize Financial Reports**

# Small Business Owners, Investors, and Anyone Trying to Comprehend Financial Data

