

SEC Filings Visualizer

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A dark blue diagonal gradient bar that starts from the bottom left and extends towards the top right, covering the lower half of the slide.

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1. Objective
2. Customizable Parameters
3. Types of Visualizations
4. Code
5. Future Improvements

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1. **Objective**
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Objective

Problem

- Companies self-report accurate data to the SEC through numerous filings (10-Q, 10-K)
- SEC's online searching tool EDGAR only supports search for one company at a time
- Hard to extract trends over time
- Some external API providers exist but endpoints are limited and inflexible

Solution

- Visualization tool that compares data for multiple companies (over 8,000 total)
- Reliable: Fetch core data directly from SEC to minimize reliance on third party APIs
- Flexible: Generate visualizations for over 600 metrics from filings

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Customizable Parameters

METRICS: Choose from 634 metrics including Earnings Per Share, P/E ratio, Debt to Equity, and more

COMPANIES: Input list of company tickers to compare

- program selects around 10 other companies in the same sector/industry if only one company provided

SECTORS or INDUSTRIES: Input list of sectors or industries to compare

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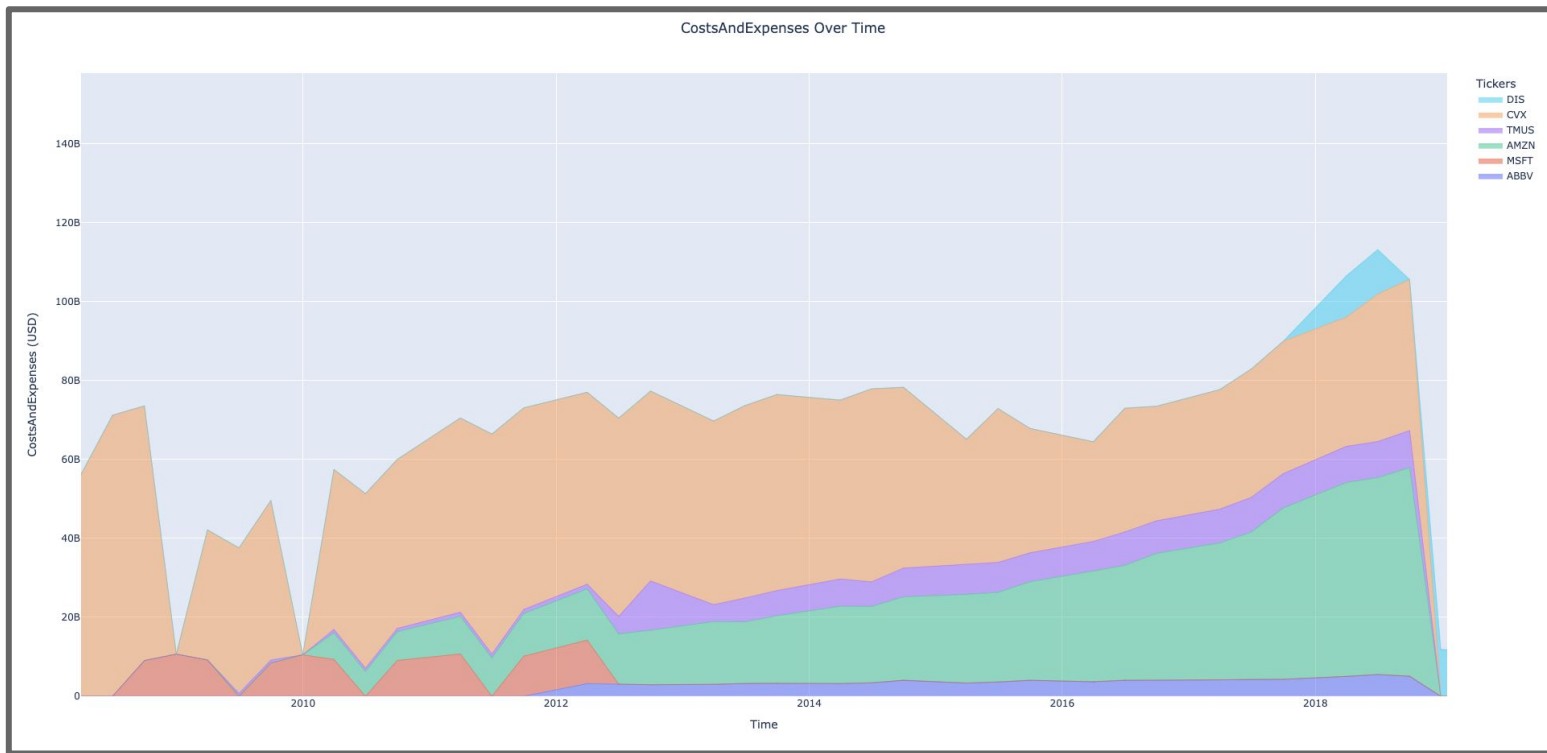
Types of Visualizations – Line Graph

```
def lineGraph(self, metric: str, tickers: List[str]) -> None:
```



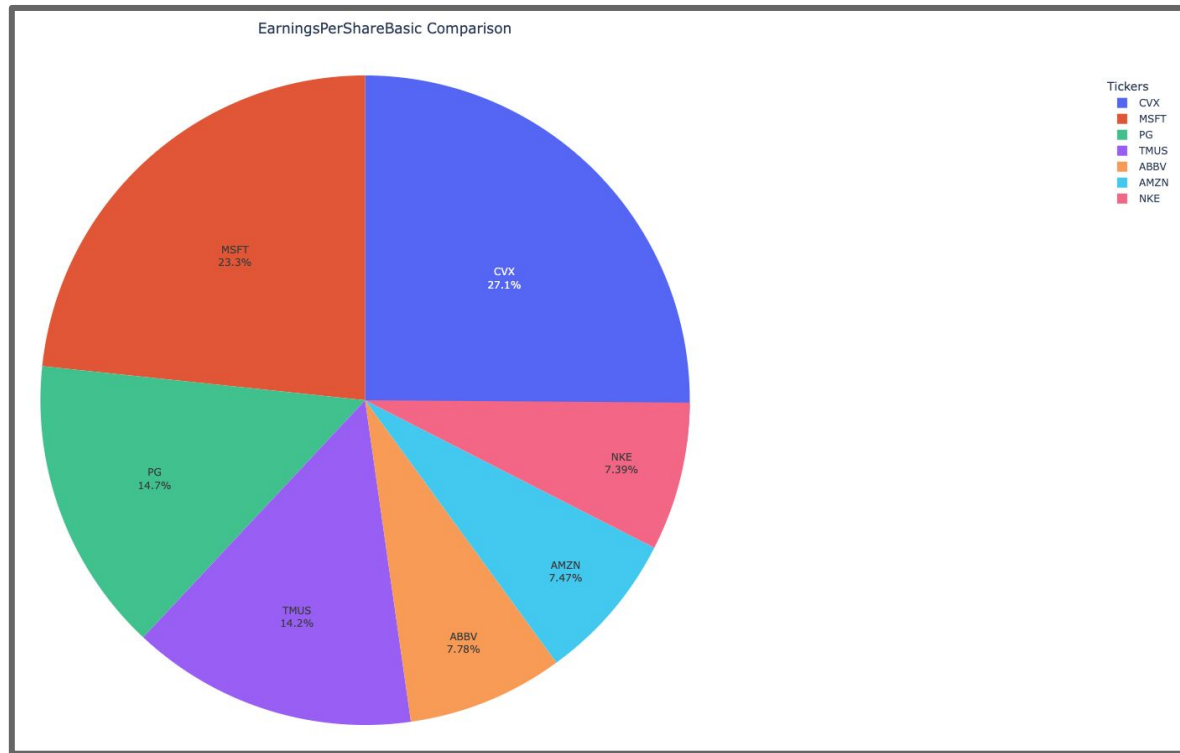
Types of Visualizations – Area Graph

```
def areaGraph(self, metric: str, tickers: List[str]) -> None:
```



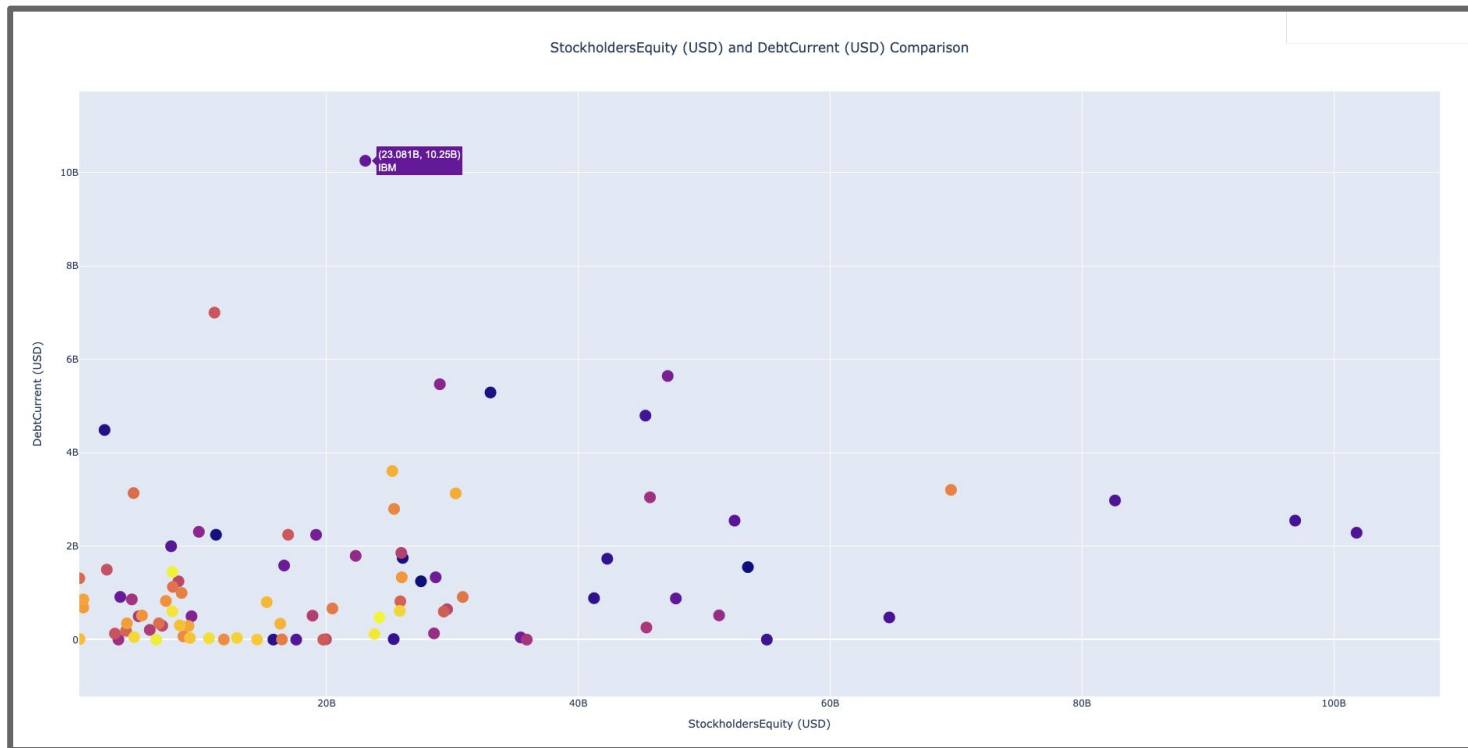
Types of Visualizations – Pie Chart

```
def pieChart(self, metric: str, tickers: List[str]) -> None:
```



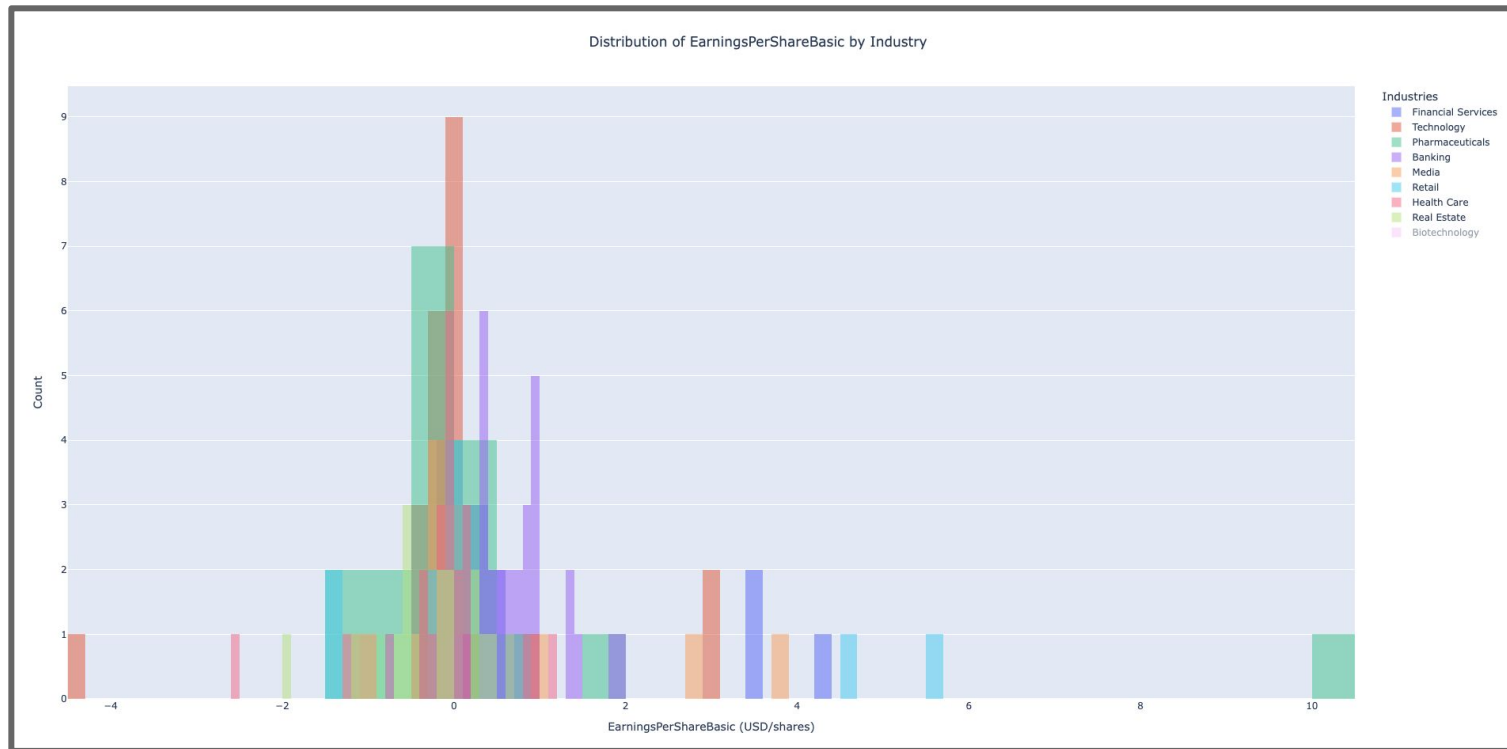
Types of Visualizations – Scatter Plot

```
def scatterPlot(self, metric1: str, metric2: str, tickers: List[str]) -> None:
```



Types of Visualizations – Overlapping Histograms

```
def overlappingHistogram(self, metric: str, industries: List[str]) -> None:
```



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Code

VisualizeFilings Public

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js5810 feat: overlapping histograms b25322a 7 hours ago 5 commits

.env.example	fix: added additional directions in .env.example file	11 hours ago
LICENSE	Initial commit	11 hours ago
README.md	feat: generate visualizations comparing data between multiple comp...	11 hours ago
company_tickers.json	feat: generate visualizations comparing data between multiple comp...	11 hours ago
finnhub_industries.json	feat: overlapping histograms	7 hours ago
visualizeData.py	feat: overlapping histograms	7 hours ago

README.md

VisualizeFilings

Generates customizable visualizations to compare data across multiple company's SEC filings

About

Generates customizable visualizations to compare data across multiple company's SEC filings

Readme

MIT license

Activity

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Releases

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Packages

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Future Improvements

1. If SEC database
missing data the
program skips
company entirely

2. Speed
bottleneck is SEC
& Finnhub API
rate limit

3. Improve design
aspect (color
palettes)

4. Add even more
chart options