

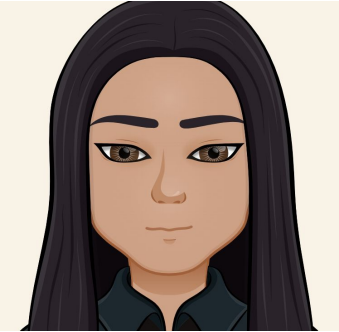


# Stock Inspector Consulting

**San Francisco | New York | Shanghai | London | São Paulo**

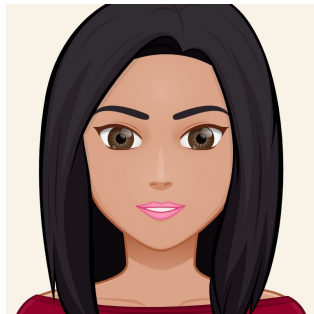
**July 11th, 2020**

# Our SF team



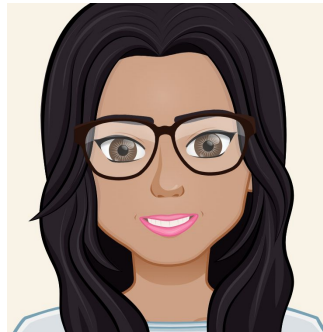
James Ye  
CEO / Co-Founder

"I love combining the rationality of coding with the emotions of financial markets"



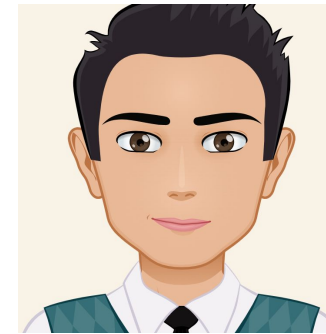
Tanvir Khan  
CTO / Co-Founder

"I want to encourage more women to invest"



Nicky Pant  
CFO

"I love when stocks hit the moon and I see my clients happy"



Paul Pineda  
CIO

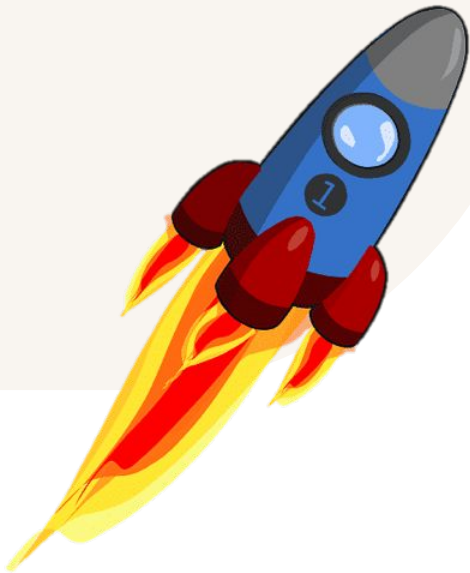
"Educating customers on investments opportunities is my passion"



Fabienne Zumbühl  
CDO

"The excitement of collecting data keeps me awake at night"

# Our Mission Statement

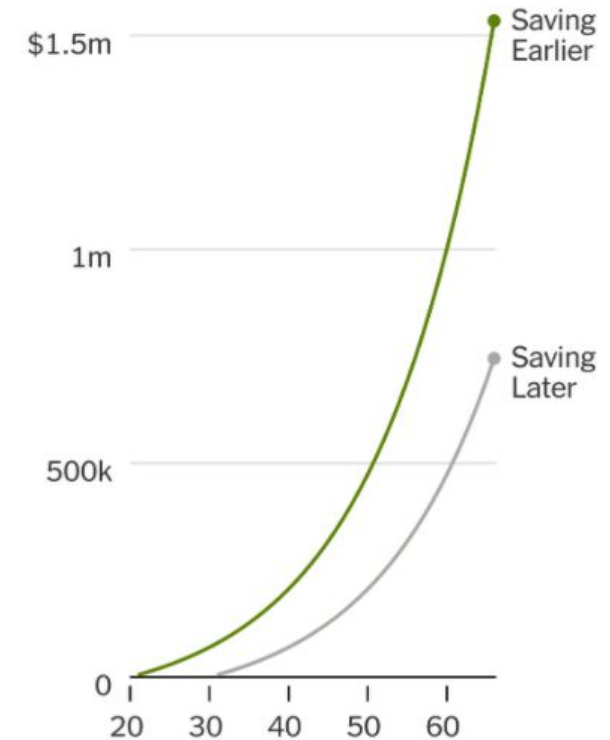


**“Make investments more accessible and easier”**



## Investing Sooner Rather Than Later Pays Off

An individual who begins investing in their twenties rather than their thirties will likely end up with a retirement account balance that is nearly twice the size.



Note: Assumes one investor starts saving \$5,000 annually at age 22, while the other starts at age 32. They both start with a \$5,000 balance, earn a 7 percent return and retire at 67.

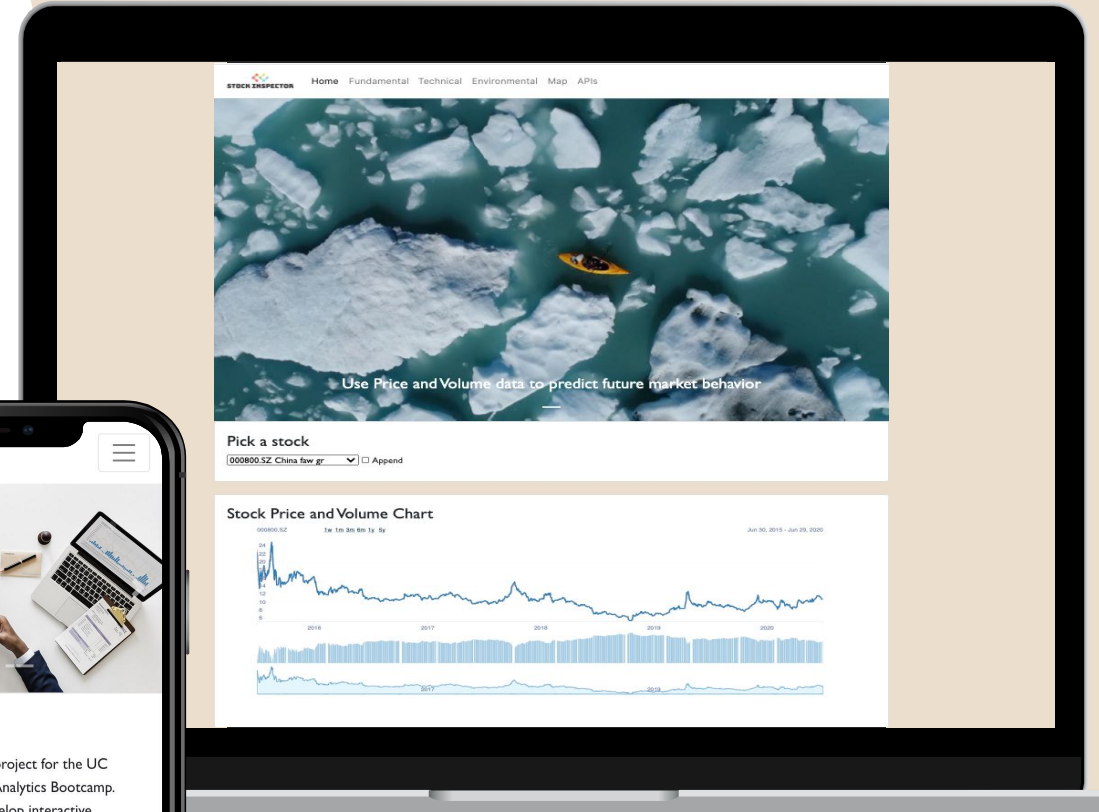
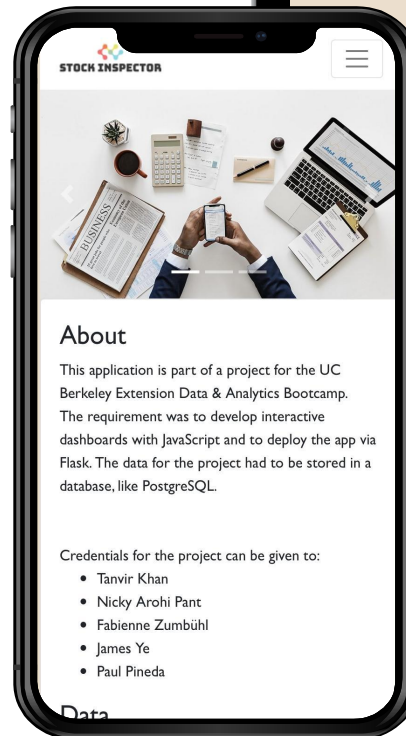
Source: New York Times (2020)



# Investing in stocks has never been so simple.

In order to solve investment decision problems that most young investors face, we developed the **Stock Inspector® application**.

The stock inspector application provides you with **fundamental, technical and environmental** data on the top **Global Fortune 171** companies.

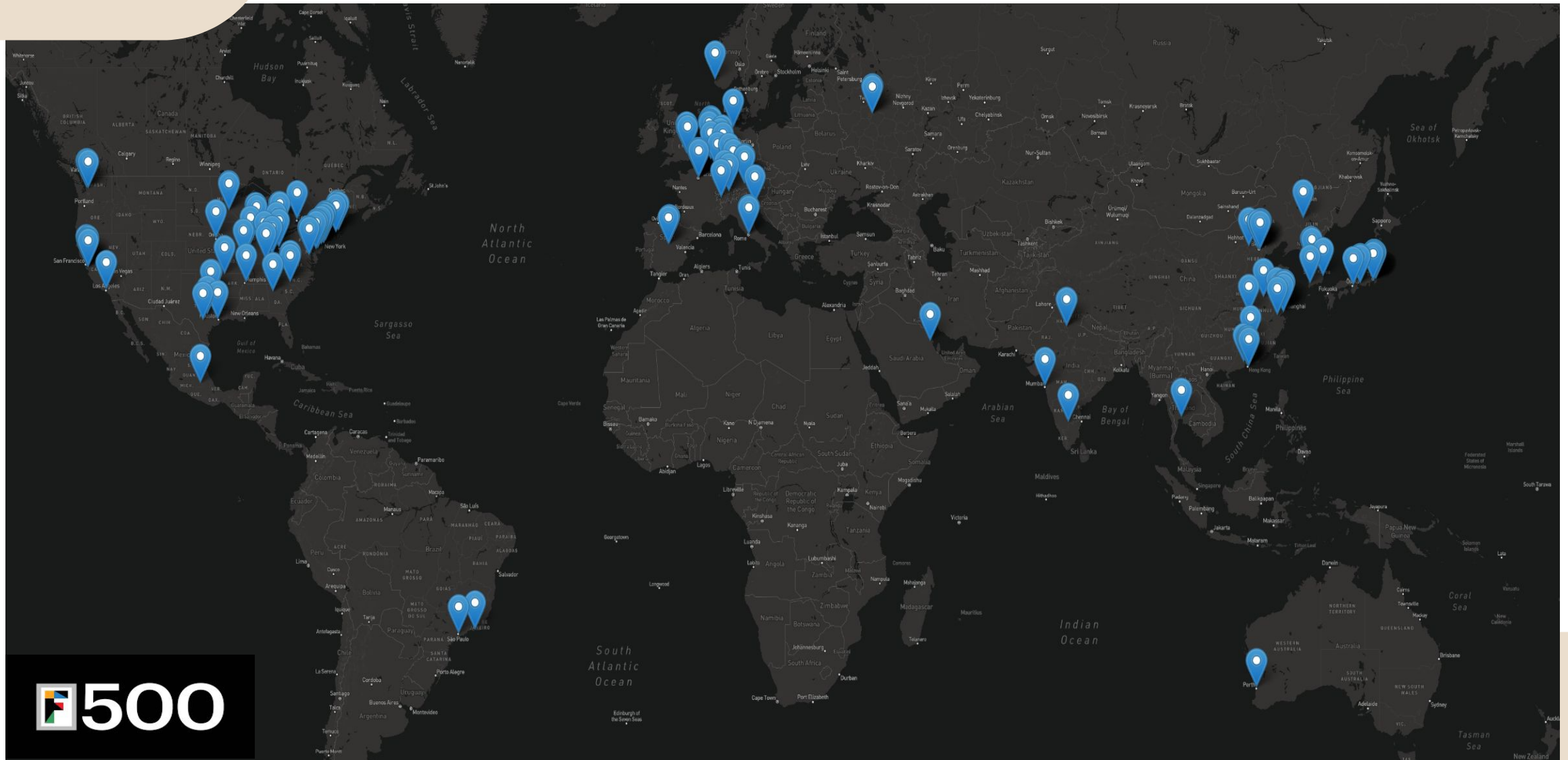


## Our Version 1.0

### For Mobile and Desktop



# Our Global Portfolio



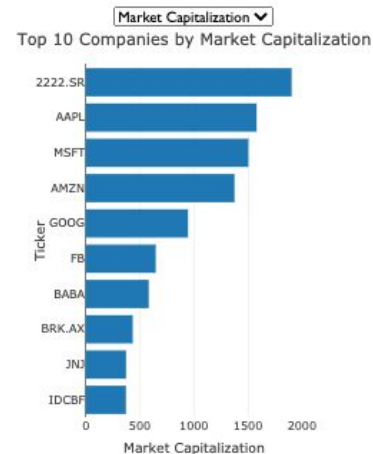
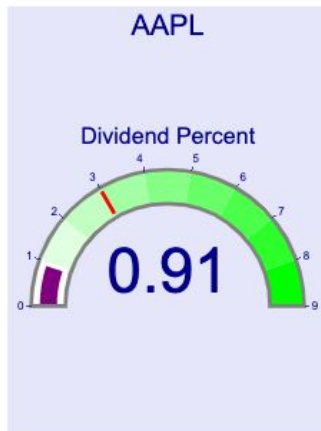
# Let's check it out!



<https://stock-inspector.herokuapp.com/>



# Fundamental Stock Data



# Fundamental Graphs

## Summary Graph

Provides an **overall summary** on the companies

## Dividend Percent Gauge

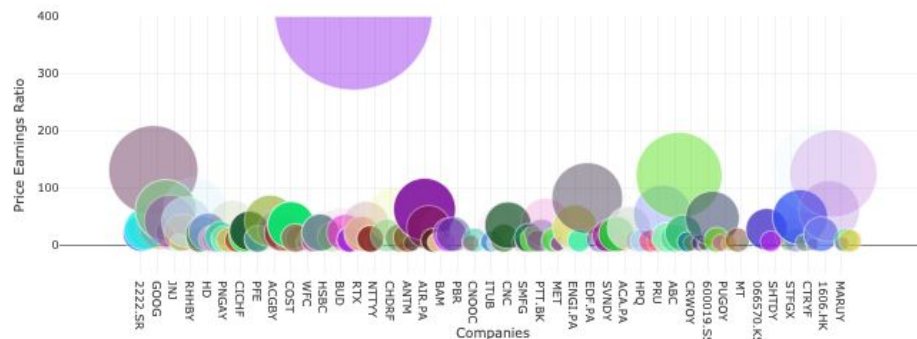
Provides an overview on the **dividend percent emitted to stockholders**

## Top 10 Companies

- for **Market Capitalization**
- for **Dividend Percent**
- for **Price per Earnings** (is inverted, meaning the lower the better)

## Reach your dream

**Relative visualization** of companies and their price earnings ratio





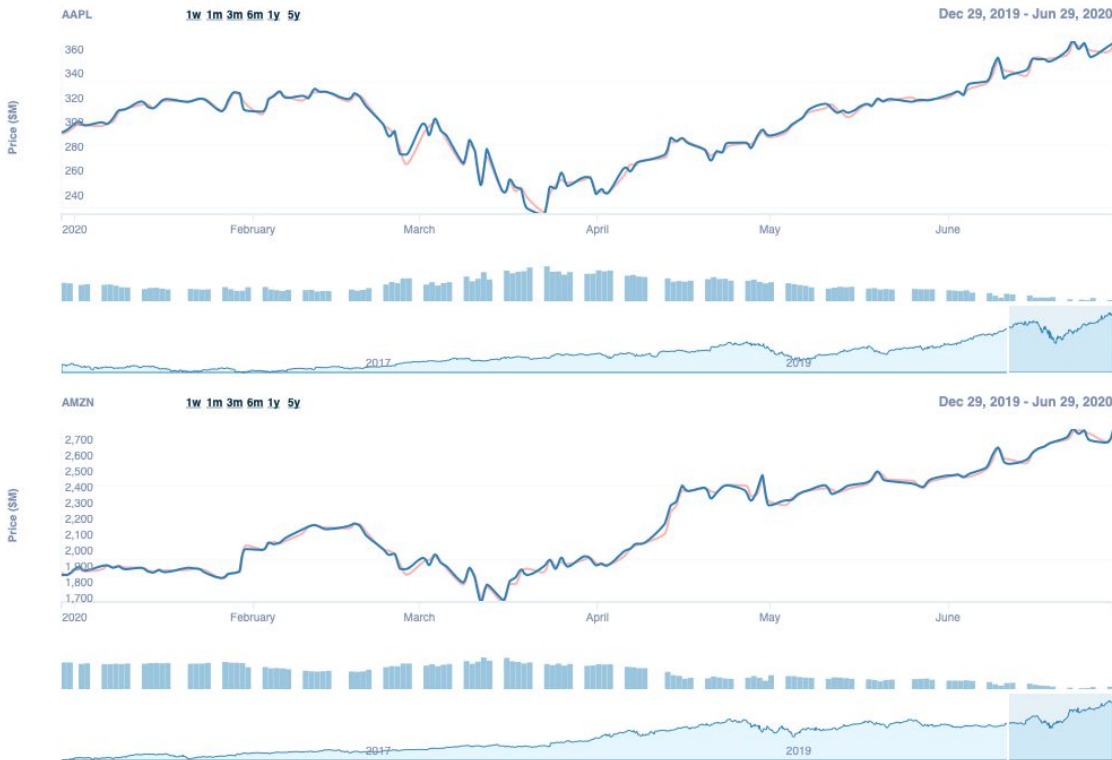
# Technical Stock Data



Pick a stock

AMZN Amazon ☒ Append

## Stock Price and Volume Chart



# Technical Graphs

## Price Graph

- user friendly **price graphs** that provide information on:
  - closing prices (blue line)
  - average prices (red line)
  - volume of stocks bought
  - market trend
- Example: After **March 2020, prices dropped** for Apple and Amazon. When the prices dropped, the volume of the stocks bought increased because people believed in the prices going up again. Which they did. Amazon recovered even faster than Apple.



**price change**



**volume change**

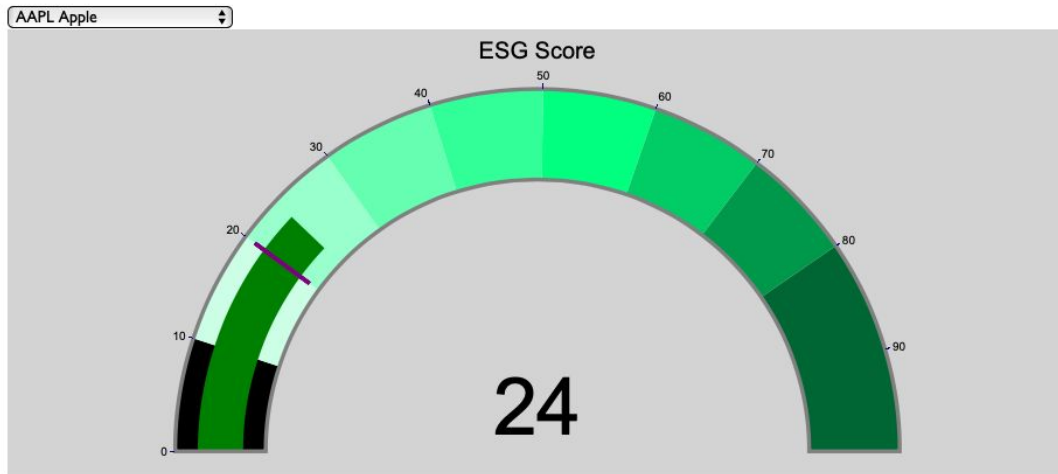


**slide bar to inspect a specific time frame**

# Environmental Stock Data

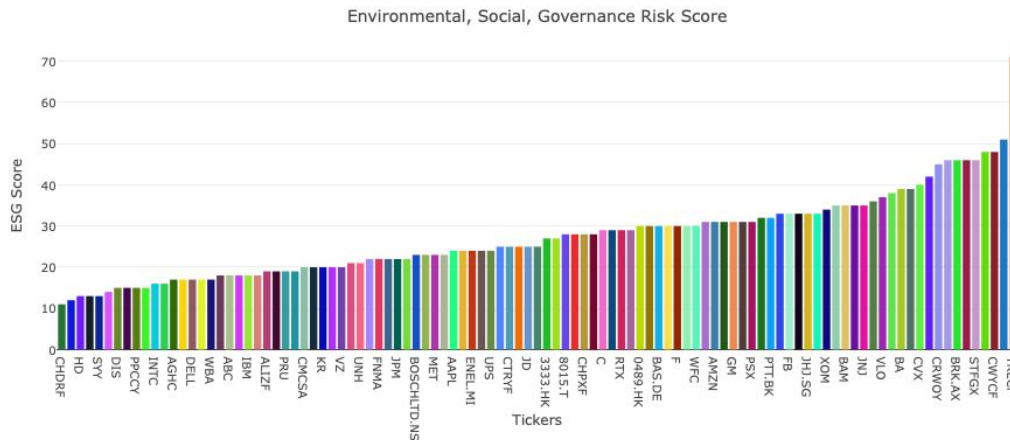
# Environmental Graphs

## Gauge Graph



- Interactive Visualization on the **ESG Score of a company**:
  - How does a company **minimizes industry specific ESG** risks
  - ESG score from **0 to 100** (Sustainalytics methodology)
  - The ESG score is a **combination of the E, the S and the G score**
  - Example: Apple has a ESG score of 24

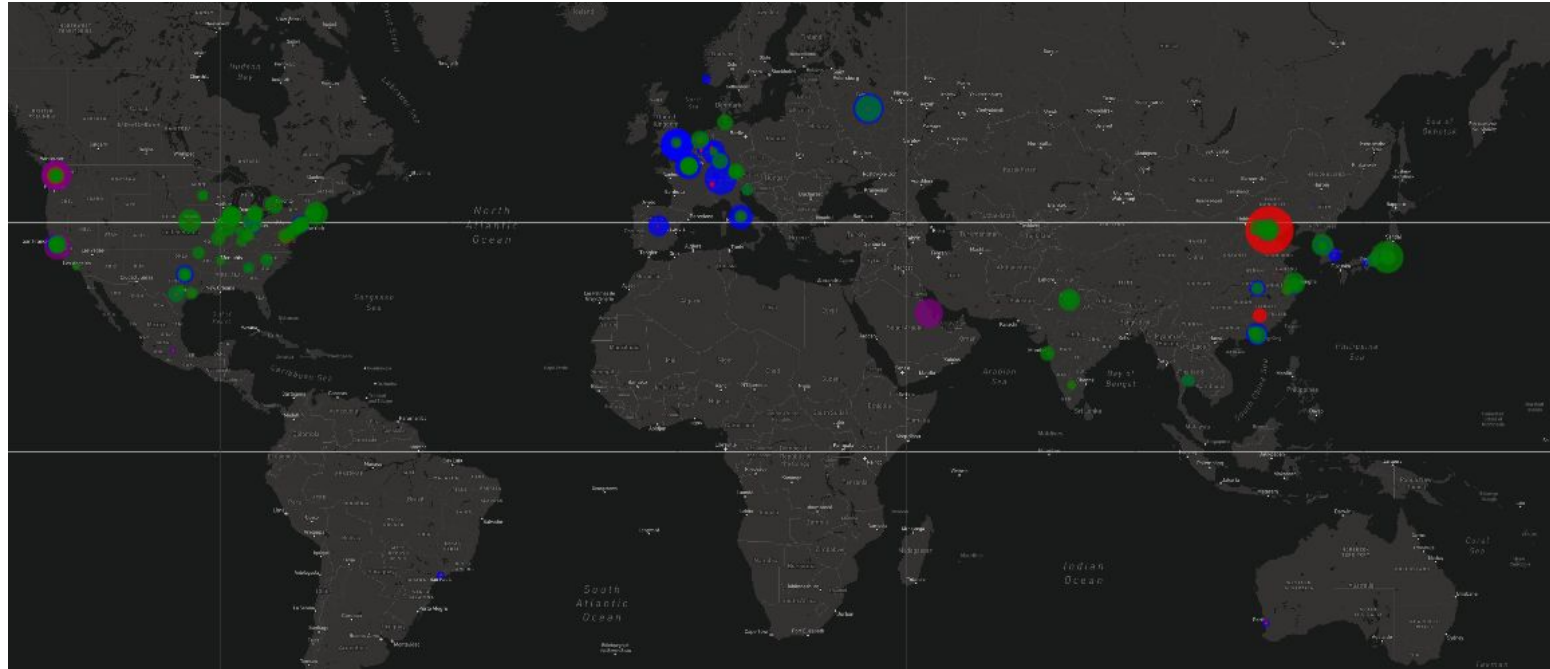
## Bar Graph



- Interactive Visualization on the **relative ESG score**:
  - **Holistic view** on all the companies
  - Sorted in **ascending order**
  - **Lowest score**: Christian Dior (11)
  - **Highest score**: Tokyo Electric Power (71)



# Overall Portfolio Representation



- **Diversified** stock portfolio
- We provide **opportunities** for **risk averse** and **risk taking investors**
- Blue Circles: Dividend Payment - Most steady in Europe
- Red Circles: Price per Earnings - highest ratio for JD.com in China
- Purple Circles: Market Capitalization
- Green Circles: ESG Rating

# Our coding approach

## Back-End



Python



PostgreSQL



SQLAlchemy



Flask



Heroku

## Front-End



HTML/CSS & Bootstrap



JavaScript

### JavaScript Libraries



Plotly, D3, Leaflet, jQuery



DataTables

New Library: Datatables

# Conclusion

There are different aspects, namely **fundamental, technical, and environmental considerations** that have to be taken into account **when investing in stocks.**

Providing a **diversified portfolio** across e.g. industries and markets is key.

## On Groupwork

**Utilizing every team members strength** in a group project leads to **knowledge exchange** and a **good final outcome!**

## Limitations

**Limited Data** on ESG score, P/E ratio & Dividend Percent

**More data** was available on **US based companies** - might lead to bias

## Outlook

**Improving the mobile version** of the Stock Inspector

**Candlestick chart** could be added

**ESG score** could be split up in **E, S and G** scores separately



**Thanks for  
Investing  
with us!**

