

# AI WARS AND HOW IT AFFECTS NASDAQ

**Risk warning:** Contracts for Difference ('CFDs') are a complex financial product, with speculative character, the trading of which involves significant risks of loss of capital. Trading of leveraged CFD products carries significant risk. Trading CFDs, which are a marginal product, may result in the loss of your entire balance. Remember that leverage in CFDs can work both to your advantage and disadvantage. CFDs traders do not own, or have any rights to, the underlying assets. Trading CFDs is not appropriate for all investors. Past performance does not constitute a reliable indicator of future results. Future forecasts do not constitute a reliable indicator of future performance. Before deciding to trade, you should carefully consider your investment objectives, level of experience and risk tolerance. You should not deposit more than you are prepared to lose. Please ensure you fully understand the risk associated with the product envisaged and seek independent advice, if necessary.

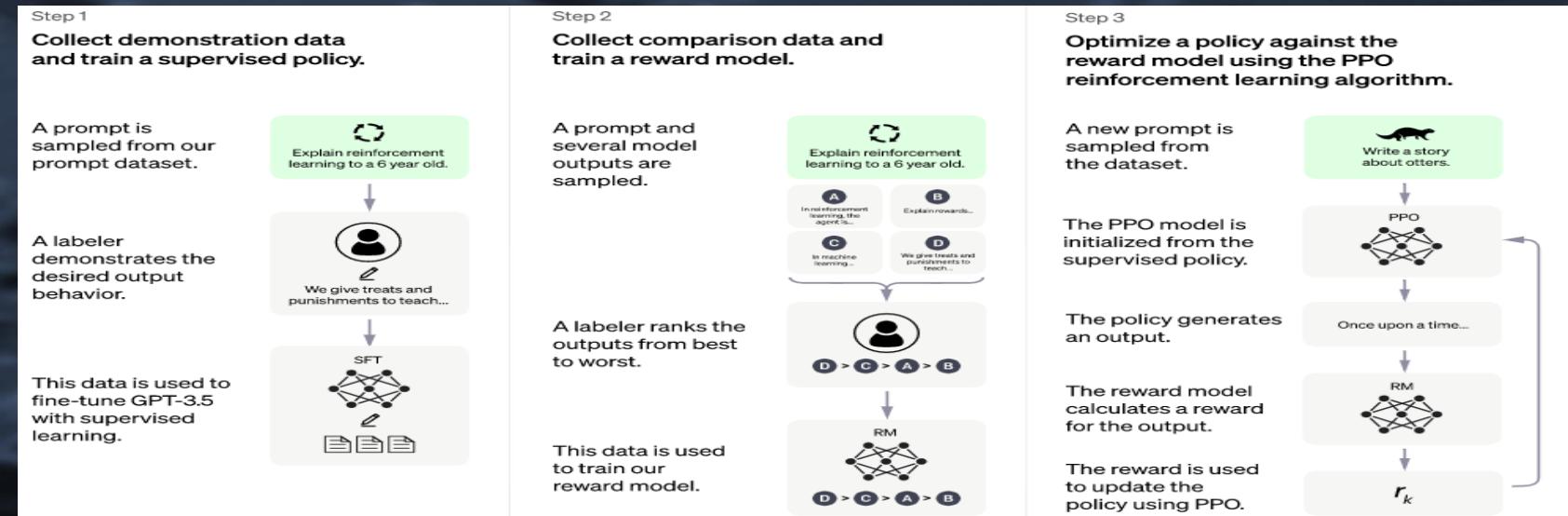


## What is the Ongoing Hype with AI?

- ❖ We had the Artificial Intelligence in our lives for quite a while, yet the year 2022 has been a period of rapid development for new AI technologies and supervised deep machine learning.
- ❖ AI applications include; advanced web search engines such as **Google**, smart recommendations (used by **Youtube**, **Netflix**, **Amazon** etc.), speech recognition (**Siri** and **Alexa**) and self-driving vehicles (such as **Tesla**).
- ❖ New applications of AI such as **Midjourney** to generate art from text input and most recently, the development and launch of highly precise **ChatGPT** (Chat Generative Pre-trained Transformer) has created a boost in tech industry, which drawn in many large investments by large cap companies in the industry.



# Big Tech on ChatGPT Frenzy



Source: [openai.com/blog/chatgpt/](https://openai.com/blog/chatgpt/)

Big Tech companies are aware of the multi-trillion-dollar potential of OpenAI's ChatGPT and an all-out war has already started.

**Microsoft (MSFT)** is aware that the winner in the **\$500 billion** and expanding global public cloud market will be the company that best integrates AI into **cloud computing** and develops the finest AI-as-a-Service offerings.

**Amazon (AMZN)** knows that the **\$5 trillion** and increasing **e-commerce** sector will be dominated by whoever uses AI to shop the most effectively and develops the most tailored **online shopping** experiences.

**Alphabet (GOOG)** is aware that the winner in the **\$200 billion** and expanding **global search engine market** will be the one who best integrates AI into search and develops the most human-like AI search engine.

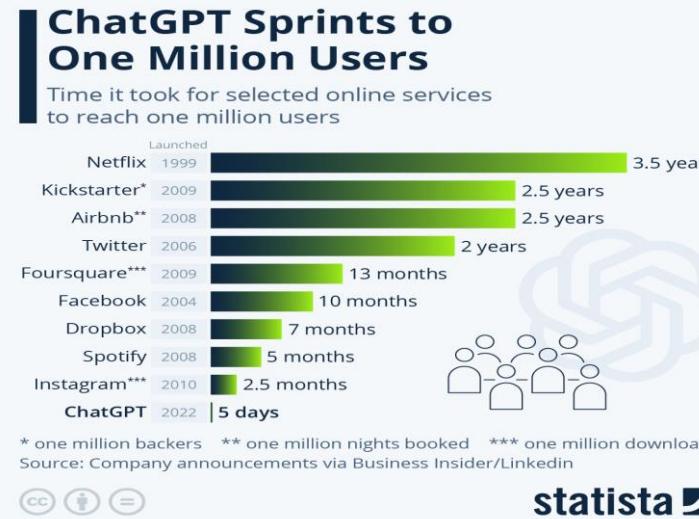
**Tesla (TSLA)** knows that whoever best applies AI to automobiles and creates the best **self-driving vehicles** will dominate the **\$3 trillion** and growing global automotive market.

## What makes ChatGPT Unique?

- ChatGPT is a natural language AI chatbot developed by OpenAI, which was founded by **Elon Musk** and **Sam Altman** in 2015.
- It can write meaningful texts in several languages and can create basic codes in all known programming languages.
- Its self-learning algorithm trains and improves the capabilities of the bot the more it's used, with increasingly accurate results.



# Recent Events after Launch of ChatGPT



## • ChatGPT Reaches to 1 Million Users in 5 Days after Launch

According to information coming from the service itself, AI tool ChatGPT gained **one million users just five days after launching** in November of 2022.

In general, it has taken far longer for other well-known online services to reach the one million user milestone. Among those that comes the closest is **Instagram**. Although measured by app downloads, the popular social media site reached one million subscribers in just **2.5 months**.

**Spotify** and **Dropbox**, two businesses that, like ChatGPT, offer an immediate practical utility, also accomplished the feat swiftly — in **five and seven months**, respectively. Social media platforms, with the exception of Instagram, often took a little longer to reach one million subscribers.

As the internet became more omnipresent over time, online services were also able to attain users faster.

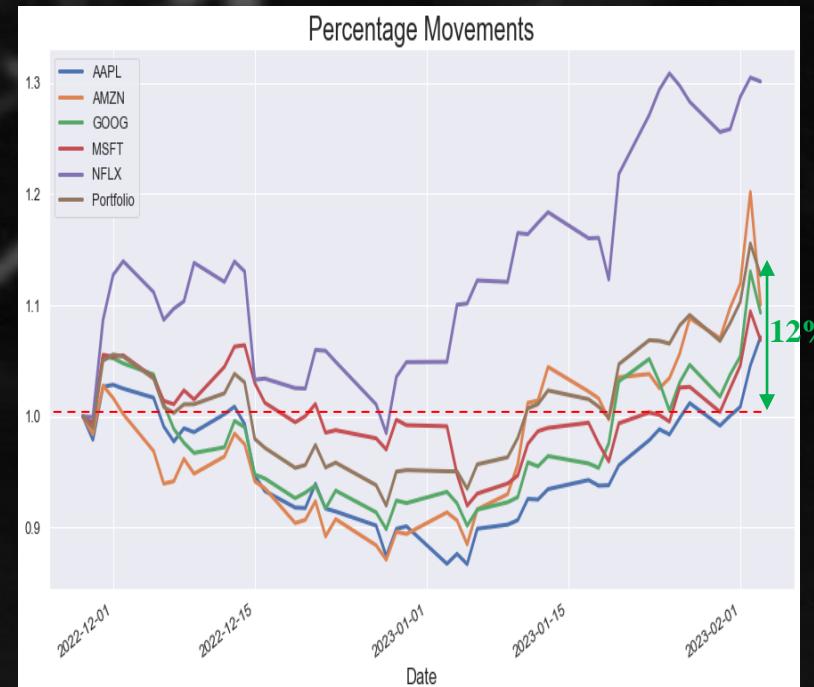
## • Big Tech Shoots Upwards

Since ChatGPT's launch on 30<sup>th</sup> of November 2022:

- Microsoft invested **\$10 billion** into OpenAI and released a new version of **Bing Search Engine** that includes ChatGPT technology.
- Alphabet launched its own ChatGPT competitor, **Bard**, and infused it with **Google Search Engine**.
- **Baidu** –China's version of Google- introduced its own chatbot competitor.
- **Alibaba** –China's version of Amazon- launched its ChatGPT competitor.
- Tesla CEO Elon Musk publicly stated on a conference call that his firm is “one of the world’s leading AI companies”.
- Apple announced its first-ever, employee-only “AI Summit”, where the company will discuss the plans for AI development.

Launch of ChatGPT already pushed the stocks of major companies upwards, with **Netflix (NFLX)** already increasing by ~25%, **Microsoft (MSFT)** by ~20% and **Alphabet (GOOG)** by ~8%.

**A portfolio created by investing in both of these companies at the time of launch for ChatGPT currently stands at an increase of 12% as of February.**



# Technical Outlook

- At the day of launch for ChatGPT, Nasdaq surged by **4.88%** in a single day.
- Since the beginning of the year, Nasdaq has increased by **15.7% Ytd**, with price still standing above 200 day-SMA (Simple Moving Average) and Relative Strength Index (RSI) above 50 points.
- **Critical Levels:**
  - ~\$10669 in **14<sup>th</sup> of October, 4<sup>th</sup> of November and 6<sup>th</sup> of January** as **Support**
  - ~\$11553 in **28<sup>th</sup> of October, 9<sup>th</sup> of December and 25<sup>th</sup> of January** as **Retracement**
  - ~\$12903 Highest price in **2<sup>nd</sup> of February**
- Price standing above **200-day SMA** and **RSI 50-point**



**Risk warning:** Contracts for Difference ('CFDs') are a complex financial product, with speculative character, the trading of which involves significant risks of loss of capital. Trading of leveraged CFD products carries significant risk. Trading CFDs, which are a marginal product, may result in the loss of your entire balance. Remember that leverage in CFDs can work both to your advantage and disadvantage. CFDs traders do not own, or have any rights to, the underlying assets. Trading CFDs is not appropriate for all investors. Past performance does not constitute a reliable indicator of future results. Future forecasts do not constitute a reliable indicator of future performance. Before deciding to trade, you should carefully consider your investment objectives, level of experience and risk tolerance. You should not deposit more than you are prepared to lose. Please ensure you fully understand the risk associated with the product envisaged and seek independent advice, if necessary.



# Analyst Ratings on Tech Stocks

Forecast based on **29 Analyst Ratings** –  
Current Price **\$272.17** as of **15/02/2023**



Forecast based on **10 Analyst Ratings** –  
Current Price **\$94.95** as of **15/02/2023**



**MSFT** is on “**Strong Buy**”  
The **High Forecast** at ~\$411 per share, **Average** ~\$291.66 whereas **Low target** at ~\$250.

**GOOG** is on “**Strong Buy**”  
The **High Forecast** at ~\$155 per share, **Average** ~\$124.60 whereas **Low target** at ~\$115.

Forecast based on **39 Analyst Ratings** –  
Current Price **\$99.70** as of **15/02/2023**



Forecast based on **30 Analyst Ratings** –  
Current Price **\$153.20** as of **15/02/2023**



**AMZN** is on “**Strong Buy**”  
The **High Forecast** at ~\$192 per share, **Average** ~\$137.05 whereas **Low target** at ~\$106.

**AAPL** is on “**Strong Buy**”  
The **High Forecast** at ~\$210 per share, **Average** ~\$172.71 whereas **Low target** at ~\$125.

# AI Wars – Trade Examples : Nasdaq (USTEC)

Investment of \$50,000

Trade panel: USTECpro

Instant execution Pending order

Bid: 12526.87 Ask: 12542.73

Volume (Lots): 30

Stop loss:

Take profit:

Price: 12880

Profit: 10118.10

Quantity: 30.00 Units

Required margin: 1881.41USD

Spread: -475.80 USD ( 1586.0 pips )

Commission: 0 \$ for 1 lot

Pip value: 0.3000 USD

BUY  
12542.73

Investment of \$75,000

Trade panel: USTECpro

Instant execution Pending order

Bid: 12528.97 Ask: 12544.93

Volume (Lots): 48

Stop loss:

Take profit:

Price: 12880

Profit: 16083.36

Quantity: 48.00 Units

Required margin: 3010.78USD

Spread: -766.08 USD ( 1596.0 pips )

Commission: 0 \$ for 1 lot

Pip value: 0.4800 USD

BUY  
12544.93

Investment of \$100,000

Trade panel: USTECpro

Instant execution Pending order

Bid: 12527.67 Ask: 12543.63

Volume (Lots): 70

Stop loss:

Take profit:

Price: 12850

Profit: 21445.90

Quantity: 70.00 Units

Required margin: 4390.27USD

Spread: -1117.20 USD ( 1596.0 pips )

Commission: 0 \$ for 1 lot

Pip value: 0.7000 USD

BUY  
12543.63

**Risk warning:** Contracts for Difference ('CFDs') are a complex financial product, with speculative character, the trading of which involves significant risks of loss of capital. Trading of leveraged CFD products carries significant risk. Trading CFDs, which are a marginal product, may result in the loss of your entire balance. Remember that leverage in CFDs can work both to your advantage and disadvantage. CFDs traders do not own, or have any rights to, the underlying assets. Trading CFDs is not appropriate for all investors. Past performance does not constitute a reliable indicator of future results. Future forecasts do not constitute a reliable indicator of future performance. Before deciding to trade, you should carefully consider your investment objectives, level of experience and risk tolerance. You should not deposit more than you are prepared to lose. Please ensure you fully understand the risk associated with the product envisaged and seek independent advice, if necessary.

Here the details for an example portfolio with the selected stocks can be reviewed



Change in price for the stocks on 5 years of data

Investment Amount:						\$100,000		Allocation:		50%		
Name Of Stock	Ticker	High	Low	Close	Pivot	Allocation to %	Units	Price	Margin	Take Profit	% Increase	Profit up to
MICROSOFT CORPORATION (XNAS:MSFT)	MSFT	\$ 274.97	\$ 269.28	\$ 271.32	\$ 271.86	30%	276	\$272.17	\$15,000	\$291.22	7%	\$5,250
ALPHABET INC. (XNAS:GOOG)	GOOG	\$ 95.18	\$ 92.65	\$ 95.00	\$ 94.28	20%	527	\$94.95	\$10,000	\$100.65	6%	\$3,000
NETFLIX, INC. (XNAS:NFLX)	NFLX	\$ 363.75	\$ 353.40	\$ 358.57	\$ 358.57	20%	139	\$359.96	\$10,000	\$388.76	8%	\$4,000
APPLE INC. (XNAS:AAPL)	AAPL	\$ 153.77	\$ 150.86	\$ 153.85	\$ 152.83	15%	245	\$153.20	\$7,500	\$163.92	7%	\$2,625
AMAZON.COM, INC. (XNAS:AMZN)	AMZN	\$ 100.92	\$ 97.52	\$ 99.54	\$ 99.33	15%	376	\$99.70	\$7,500	\$105.68	6%	\$2,250
Total						100%		Total Margin	\$50,000	Total Potential Profit	\$17,125	

Source: Yahoo Finance



**Risk warning:** Contracts for Difference ('CFDs') are a complex financial product, with speculative character, the trading of which involves significant risks of loss of capital. Trading of leveraged CFD products carries significant risk. Trading CFDs, which are a marginal product, may result in the loss of your entire balance. Remember that leverage in CFDs can work both to your advantage and disadvantage. CFDs traders do not own, or have any rights to, the underlying assets. Trading CFDs is not appropriate for all investors. Past performance does not constitute a reliable indicator of future results. Future forecasts do not constitute a reliable indicator of future performance. Before deciding to trade, you should carefully consider your investment objectives, level of experience and risk tolerance. You should not deposit more than you are prepared to lose. Please ensure you fully understand the risk associated with the product envisaged and seek independent advice, if necessary.

# Sources for Information

The Bloomberg logo, displayed on a blue rectangular background with the word 'Bloomberg' in white, bold, sans-serif letters.The Forbes logo, shown in a large, blue, sans-serif font.

## Libraries Used (Python 3.9)

Yfinance, Numpy, Pandas, Matplotlib, Plotly, Seaborn

Provided by Emir E

**Risk warning:** Contracts for Difference ('CFDs') are a complex financial product, with speculative character, the trading of which involves significant risks of loss of capital. Trading of leveraged CFD products carries significant risk. Trading CFDs, which are a marginal product, may result in the loss of your entire balance. Remember that leverage in CFDs can work both to your advantage and disadvantage. CFDs traders do not own, or have any rights to, the underlying assets. Trading CFDs is not appropriate for all investors. Past performance does not constitute a reliable indicator of future results. Future forecasts do not constitute a reliable indicator of future performance. Before deciding to trade, you should carefully consider your investment objectives, level of experience and risk tolerance. You should not deposit more than you are prepared to lose. Please ensure you fully understand the risk associated with the product envisaged and seek independent advice, if necessary.