# OPTION PRICE WIDGET

William Mai February 23 2022



## INTRODUCTION

#### Historical End of Day Option Prices App:

- What is available looks legacy
- Good ones are not free
- For academic learning purposes a "chart" is worth a thousand words



# **DATA PIPELINE**









#### API

Data is retrieved from EOD Historical Data API

#### MONGODB ATLAS

Data is stored on MongoDB Atlas

#### **GITHUB**

Python scripts are hosted on GitHub

#### **STREAMLIT**

The App is hosted on Steamlit

## **DATA - ONE DOCUMENT**

- One Ticker10 most active stock options
- One Trade Date
- Trade Price of stock
- Expiration Date
- Strike Price
- Type of Option

Call / Put



- Bid Price
- Ask Price
  - Volumn
  - Greeks

Delta

Gamma

Theta

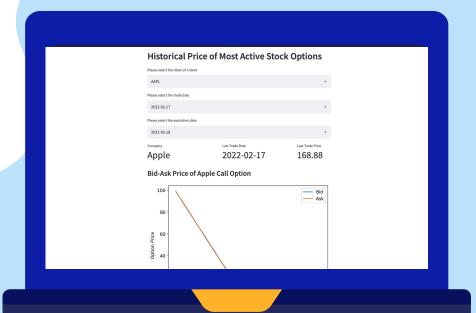
Vega

Rho

Implied Volatility

- Intrinsic Value
  - Time Value

# **DEMO**



# CONCLUSION



#### **MISSION**

The app provides a clean and easy way to visualize the detail of a specific option





Much more charts can be implemented to meet the needs of the end-users

# **THANKS**

#### Do you have any questions?

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GitHub: https://tinyurl.com/2p9xa7fu

Widget:



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