## **Setting Up Auto Trader Client Checklist**

NOTE: Never place sensitive personal information or account credentials (API keys, account numbers, etc.) in a publicly accessible location like GitHub, shared computers, shared cloud storage etc.

- 1. Clone the repository or download the code from GitHub. All relevant Auto Trader Client code is contained in the "auto\_trader\_client" directory
- 2. Rename "auto\_trader\_client/sample\_config" directory to "config". Remove "sample\_" from the name of the .json files in the directory.
- 3. Google Cloud Platform (GCP)
  - a. Set up a GCP account
  - b. Create a GCP service account for Auto Trader and download the service account key to the config directory. For help see the "Creating GCP Service Account and Key.pdf" in docs
  - c. Update the path name to service key in "auto\_trader\_client/src/client\_settings.py". E.g.:

```
GCP_CREDS_PATH = "config/<service account key file name.json>"
```

- d. Place the name of the GCP bucket that will be listened to in "config/storage\_bucket.json"
- 4. TD Ameritrade (TDA)
  - a. Create an account and register your app with the TD Ameritrade Developers site
  - b. Obtain the TDA consumer key (aka client\_id, aka API key) and place it in the "tda\_api\_key" in the "config/tda\_auth\_params.json"
  - c. Update "tda\_auth\_uri" in "config/tda\_auth\_params.json" with the name of the URI (aka URL) that you registered with your TDA Developer app

d. Update "tda\_acct" in "config/tda\_auth\_params.json" with your TDA account number

## 5. Order Guidelines

a. In "config/order\_guidelines.json", set the order value. This is the upper limit value for placing a single order. For example:

If the order value is 500 (\$500) and options contracts are being purchased with a lot value of  $$150 = ($1.50 \text{ quoted price}) \times (100 \text{ underlying shares})$  then a total of 3 contracts will be purchased

4 contracts would cost \$600 in this example and exceed the order value limit

b. In "config/order\_guidelines.json", set the buy\_limit\_percentage. The buy limit percentage is used to set a limit on buy orders based on the signaled price ("contract price"). For example:

If the signaled price ("contract\_price") on a BTO order is \$1.00 and the buy\_limit\_percentage is 0.05 (5%), then the BTO order will be placed with a buy limit of \$1.05. The order will only execute if the BTO order can be fulfilled at a purchase price better than or equal to \$1.05

c. In "config/order\_guidelines.json", set the SL\_percentage. This is the percentage used to issue stop-loss orders. When executing a BTO order, a second STC stop-market order is also placed. The stop-market activation price is set as a percentage below the signaled contract price. For example:

If the signaled price ("contract\_price") on a BTO order is \$1.00 and the SL\_percentage is 0.10 (10%), then the STC stop-market order accompanying a BTO order will be \$0.90

6. Download the geckodriver executable (geckodriver.exe) and save it to the "auto\_trader\_client/bins" directory. Geckodriver is used by the Selenium package and is needed for initially authenticating into TD Ameritrade. Geckodriver for your OS can be found at:

## Additional details on Selenium can be found at:

 $\underline{https://selenium\text{-}python.readthedocs.io/installation.html\#drivers}$