PyAlgoTrade: Backtesting Framework

Source:
https://www.quantstart.com/articles/backtesting-systematic-trading-strategies-in-python-considerations-and-open-source-frameworks/

Documentation:
http://gbeced.github.io/pyalgotrade/docs/v0.20/html/index.html

GitHub:
https://github.com/gbeced/pyalgotrade

Basic Info

1. Can get data from Quandl in CSV format
2. Create Strategy classes
3. Built-in technicals: calculations (like SMA) on data series
4. Has optimization features for a strategy
    a. Likely would need some sort of parallelization (server + workers)
    b. Don't know if this can be done on a PC

Basic Flow

1. Create a Strategy class (inherits from strategy.BacktestingStrategy)
2. Use the technicals to make strategy more sophisticated
    a. Example: use built in Simple Moving Average calculations, etc.
3. Import in CSV data:
    a. python -m "pyalgotrade.tools.quandl" --source-code="WIKI" --table-code="ORCL" --from-year=2000 --to-year=2000 --storage=. --force-download --frequency=daily
    b. This command will create a csv file of Oracle's daily stock data from the year 2000
4. Use the optimization features to find the correct parameters