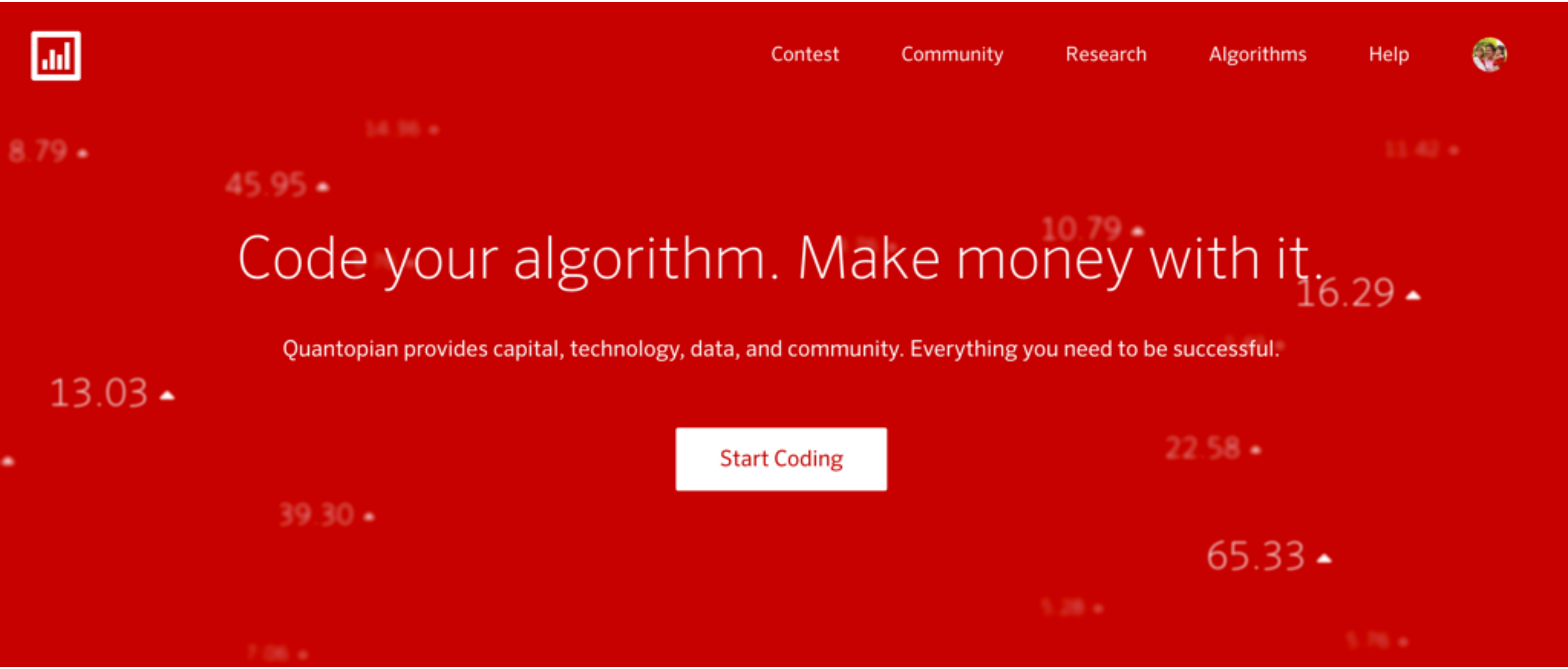


Quantopian

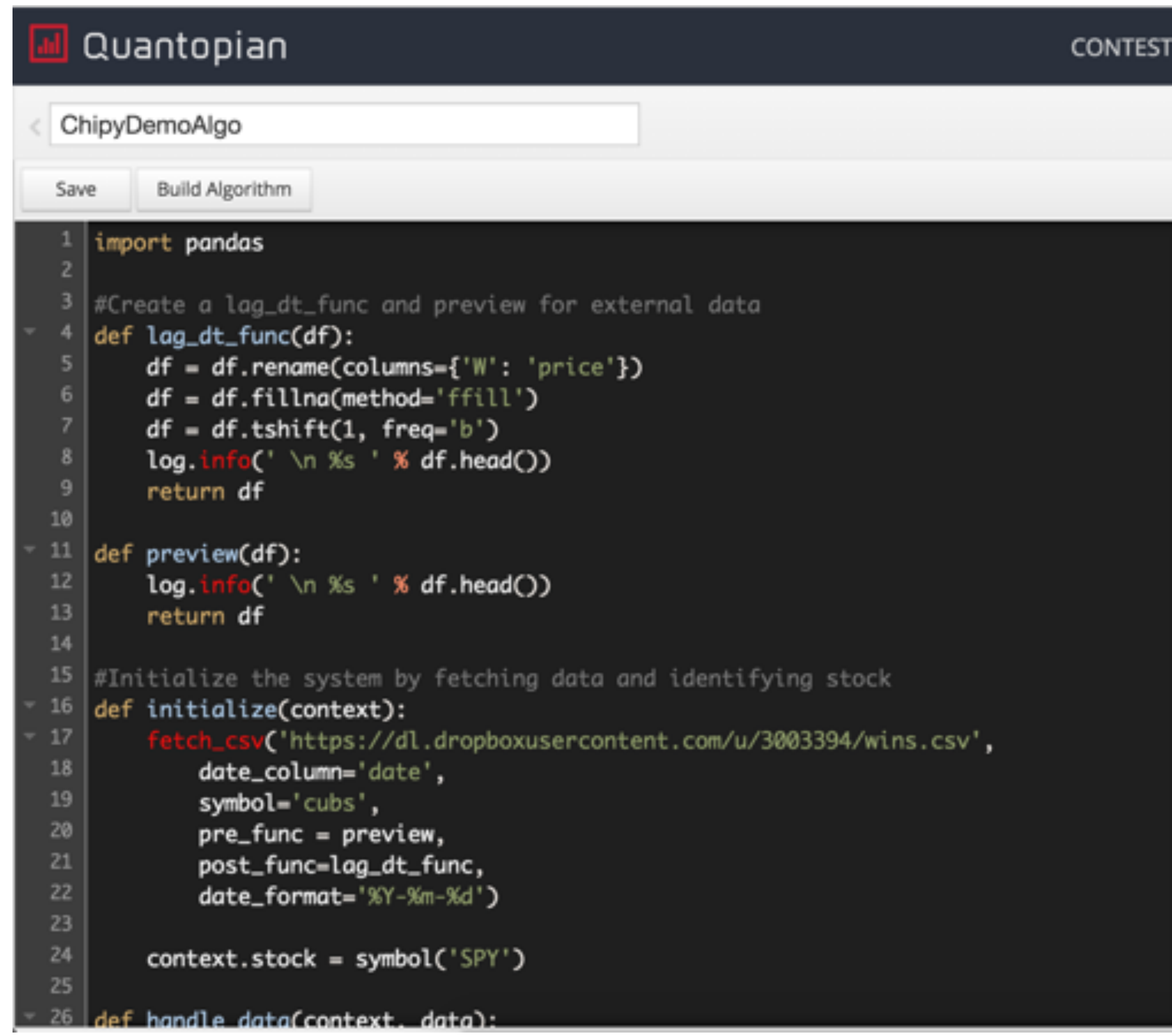
Chipy - September 2015

Setup

- Github: davidkunio/chipy-quantopian
- iPython Notebook
- Quantopian IDE/Backtest: Research backtests
- Slack: https://chipy-slack-invites.herokuapp.com/

Agenda

- Quantopian Overview
- Quantopian IDE Example
- Backtest Examples



Quantopian is…

- Platform for building investment strategies
- Jupyter based IDE + Custom Backtest Module - no install necessary. High powered batteries included
- Powered by open-source: Zipline
- Connected to a broker (IB) for live trading
- Surprisingly active forum

Quantopian isn't…

- Setup for High Frequency Trading (HFT) - per minute

- Fully open to the python development stack. There are integrated packages and a package white list system

- Multi asset class. US Equity/ETF Cash

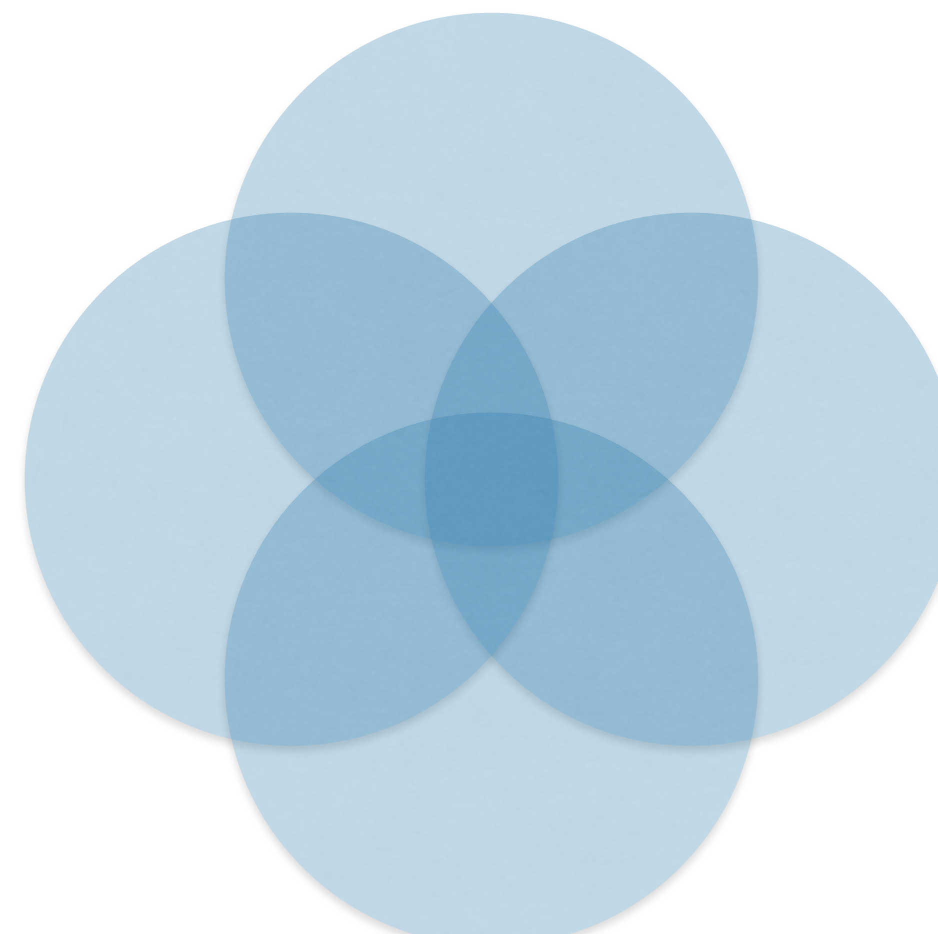
- Limited Data: Namex per minute + Morningstar Fundamentals (Can access http hosted CSV files)

Quantopian is trying to…

- Crowd source a hedge fund
- Incentivize people to share their strategies.
- Contest - Run their money.

Quantopian needs a multi-dimensional person.

- Finance knowledge (or at least some intuition)
- Python skills
- Hacker skills
- Access to tradable capital



Researching in Quantopian

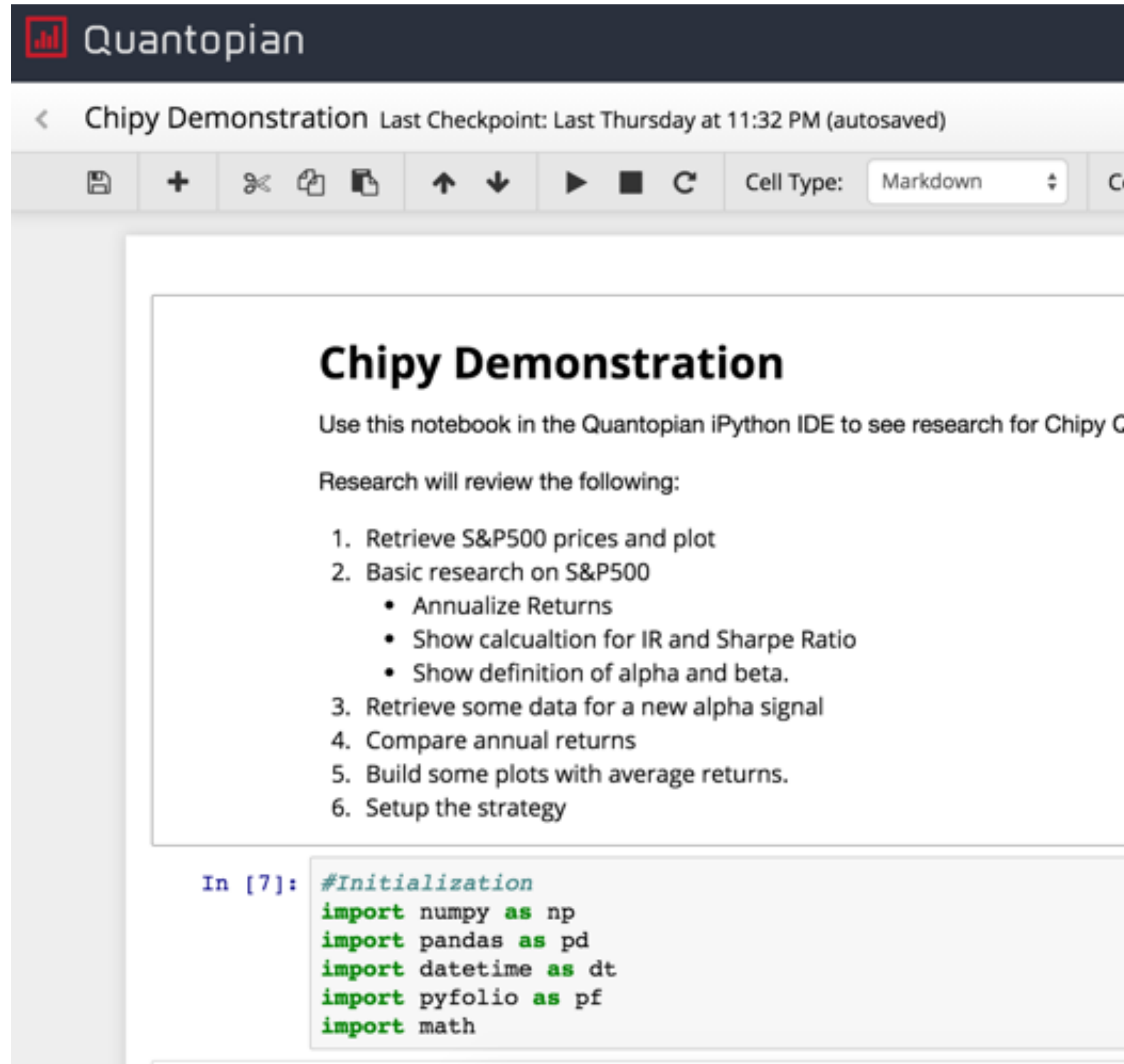
Strength	Weakness
Access to Quantopian API	Limited package support
Integrated Dynamic Coding tools	No environment support
Strong user support	

Quantopian

Lets take a tour

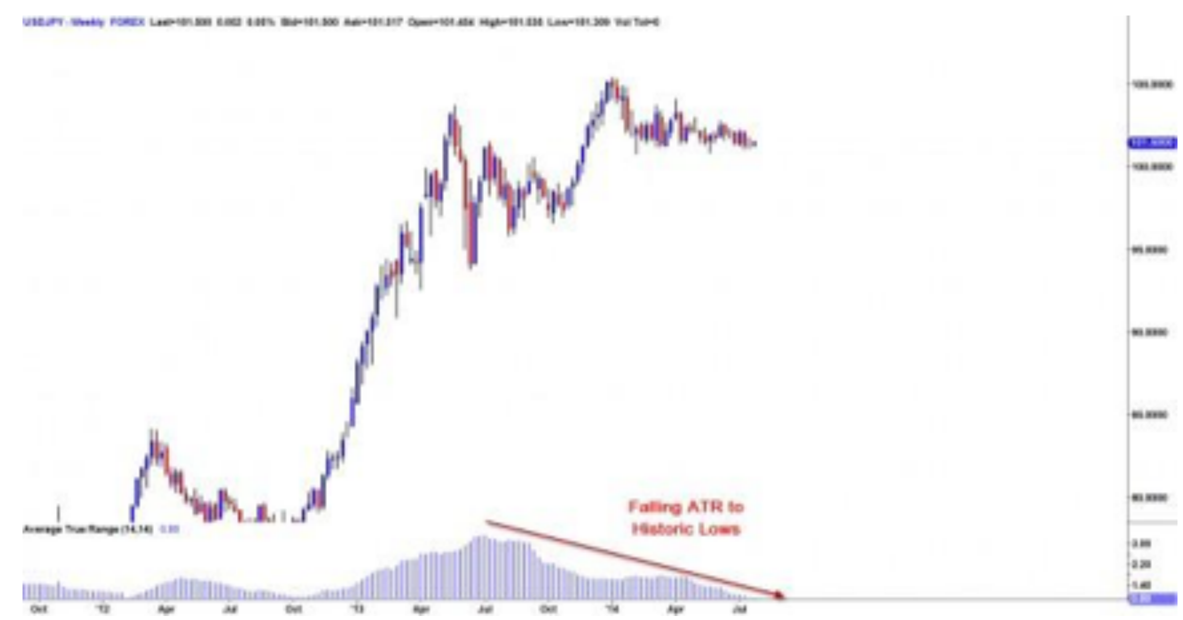
Research

- Explore in the tool
- External Data
- Researching a strategy
- Live Code Example!



Robust Strategy

- Intuitive connection to market economic thesis
- Diversified: broad market, good spread of out performance in a variety of market conditions
- Reproducible: Backtest, Out of sample testing, live monitoring
- Risk Optimized: Factor Exposures,



Some Closing thoughts

- Use the forums: Quants are typically reserved, but the forums are quite active
- Clone Algorithms
- Fundamental Strategies are somewhat unexplored
- Developing in the IDE has perks, but more formalized research (iteration, optimization) can be better handled outside of the product.
- Backtests aren't “real”. There are a lot of other considerations: transaction cost, margins, slippage, tax, etc.

Backtest Challenge

Places to start:

1. Improve the model
2. Alternative trading strategy (Going to cash isn't ideal)
3. Leverage - Leveraged ETF
4. Optimization

Other Resources

- This Presentation on Github
- Quantopian Overview: Jess Stauth
- General Quantopian Resources
- Strategy Building: Dan Dunn
- Slack for the Group