Getting Started with Zipline

**Zipline** is a backtesting framework developed by Quantopian for backtesting trading strategies. It offers useful APIs for **algorithm developmen**t and **data acquisition**, as well as the ability to realistically simulate trading factors such as [**slippage**](https://www.investopedia.com/terms/s/slippage.asp), **transaction costs**, and **order delays**.

Unfortunately, Quantopian doesn’t support live-trading over their platform. However, [**Alpaca**](https://alpaca.markets/) has written a library called [**pylivetrader**](https://github.com/alpacahq/pylivetrader) that integrates the use of their API with Zipline for live-trading. This means that you can use Zipline in Quantopian to research and backtest a strategy, then convert your strategy to paper or live-trade through Alpaca.

Resources:

* [Install pylivetrader on Windows](https://docs.alpaca.markets/platform-migration/pylivetrader-windows/)
* [Pylivetrader](https://github.com/alpacahq/pylivetrader/)
  + Integration of Quantopian’s Zipline for live-trading with Alpaca trading API
  + Data source: Alpaca Data API (sourced by IEX) or Polygon
  + Data frequency: Daily/intraday
* [Pipelinelive](https://github.com/alpacahq/pipeline-live/)
  + Integration of Quantopian’s Pipeline for live-trading
  + Data source: Alpaca Data API, IEX, Polygon
  + Data frequency: Daily
* [Migrating algorithm from Zipline to pylivetrader](https://docs.alpaca.markets/platform-migration/zipline-to-pylivetrader/)
* [Migrating Pipeline to pipelinelive](https://docs.alpaca.markets/platform-migration/quantopian-to-pipeline-live/)
* [Learn Zipline and Pipeline](https://www.quantopian.com/tutorials)
* [Quant workflow](https://www.quantopian.com/posts/a-professional-quant-equity-workflow)
* [Setting persistent environment variables in a conda env](https://docs.conda.io/projects/conda/en/latest/user-guide/tasks/manage-environments.html#saving-environment-variables)