Gemini Update 3

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My Gemini Statistical Arbitrage project has been running for the past few weeks, making occasional trades using a mean reversion strategy for cointegrated cryptocurrencies. I haven't noticed any huge issues yet with either the code or the general strategy. Since the general solution is stable, I'm looking at what steps I can take to fine tune my algorithm to make it as efficient as possible.

One term I never heard during my Data Science bootcamp but keeps coming up in articles I'm reading is "operationalizing" a model or algorithm. Priya Kumari defines it in her blog post as "subjecting the machine learning models to real-world environments wherein they can act on the real-world data and generate the prognostications for the real-world problems", and she breaks it down into a series of steps, but the most interesting to me are the "iterative improvement" and "monitoring model performance" steps. The buying and selling thresholds I'm using were set based on backtesting my strategy over the past several months of data, but I'd like to continuously evaluate how different thresholds would perform, and update the thresholds automatically as new data comes in.

Iterative improvement is also linked to "incremental training" or "incremental algorithms" that can utilize new information without re-running the entire analysis on the new data set. I don't have any experience with incremental algorithms, so this is a very exciting new area of Data Science for me to explore. I can't wait to implement the things I learn in my trading project and share the results here!