Project 2

For Project 2, me (Josiah Sweeney) and my project partner (Aneesha) mostly worked separately to cover more ground for the second part. For my portion, I decided to look at additional filters to IVR. What I found was limited success with looking at the percentage IV change over the past trading week as a factor along with IVR. I also decided to not wait until I had sold a trade to start a new one, this way, I was able to test much more trades. In the table below, you will see that data along with the filtering to achieve this. In my (Josiah’s) code zipfile, you will find the modified file, along with lots of other commented code of different experimentation that I went through.

|  |  |  |  |
| --- | --- | --- | --- |
| IVR | P/L | Success Rate | Standard Deviation |
| 20 | 58317 | 75.48 | 1.32 |
| 30 | 46353 | 73.99 | 1.37 |
| 40 | 42133 | 75.11 | 1.38 |
| 50 | 24669 | 72.34 | 1.51 |
| 60 | 17220 | 72.91 | 1.58 |
| 70 | 12856 | 77.52 | 1.69 |
| 80 | 8472 | 81.08 | 1.7 |

|  |  |  |  |
| --- | --- | --- | --- |
| IVR+Percentage Filtering | P/L | Success Rate | Standard Deviation |
| 20, 10% | 32311 | 77.44 | 1.37 |
| 30, 10% | 23814 | 75.53 | 1.47 |
| 40, 10% | 23202 | 77.63 | 1.42 |
| 50, 10% | 12013 | 72.93 | 1.58 |
| 60, 10% | 6884 | 75 | 1.68 |
| 70, 10% | 4662 | 78.9 | 1.96 |
| 80, 10% | 3058 | 83.08 | 1.93 |

Aneesha wrote quite a bit of matlab code and looked at the binning effects on the different IVR filters. In her zip file you will find her rewritten code that includes several graphs and the effects looking at the different filtering effects and different IV binning effects. All of the results are tabulated in a results.csv file where the columns for profit/loss for each filter can be found along with trade date, equity, success, and the reason for trading.