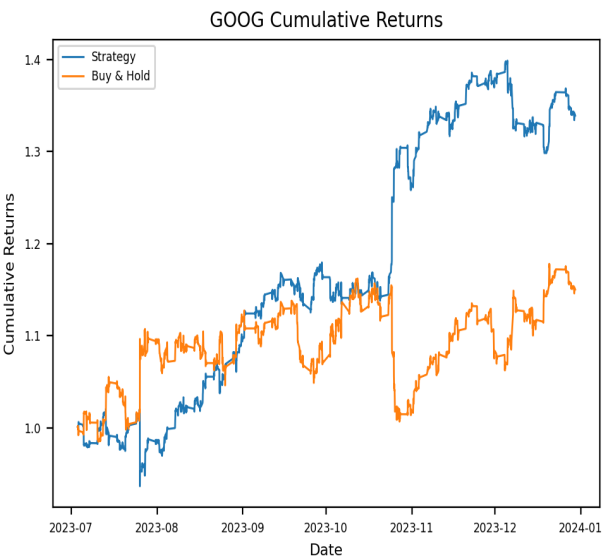
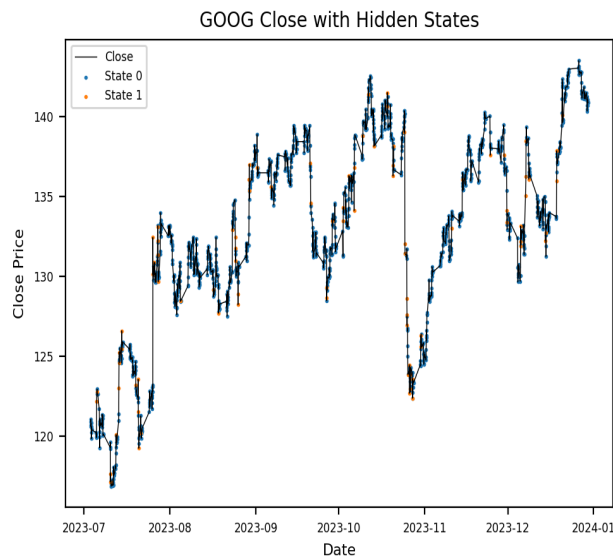
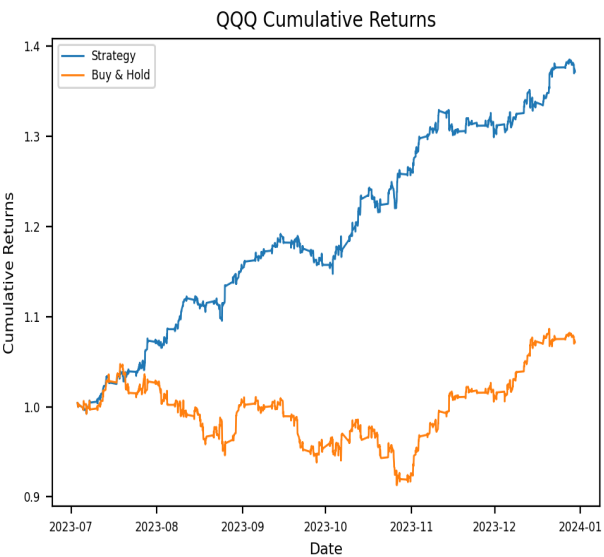
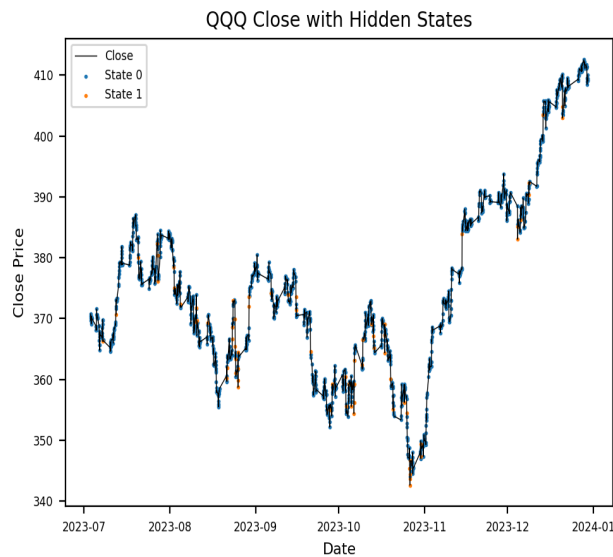
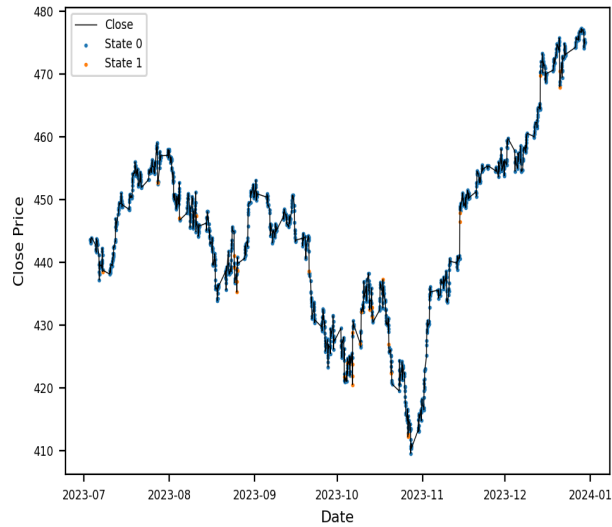


# Individual HMM Model Performance Report

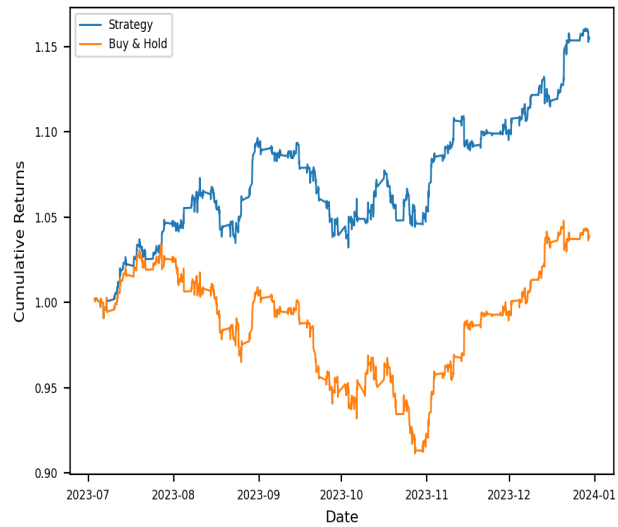
Ticker	Strategy Return	Buy & Hold Return	Outperformance	Sharpe Ratio	Max Drawdown
QQQ	37.15%	7.14%	30.01%	26.55	-3.72%
GOOG	33.90%	15.01%	18.89%	12.38	-8.21%
SPY	15.49%	3.83%	11.66%	11.96	-5.86%
JPM	14.38%	16.91%	-2.53%	7.17	-11.33%



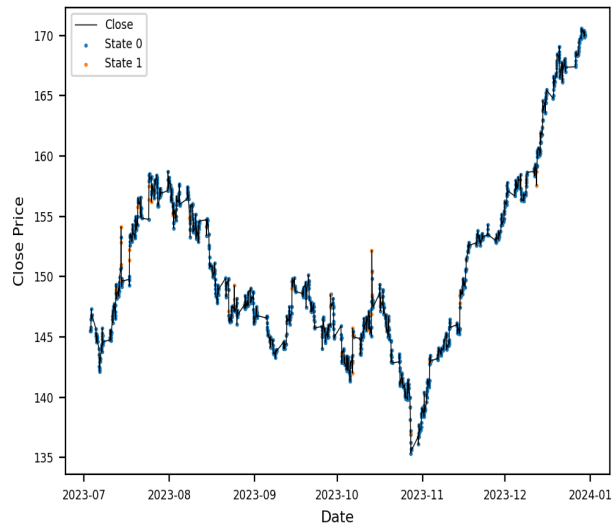
SPY Close with Hidden States



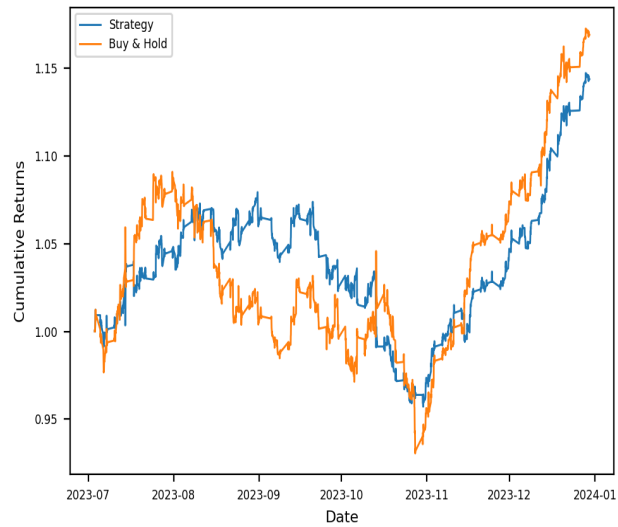
SPY Cumulative Returns



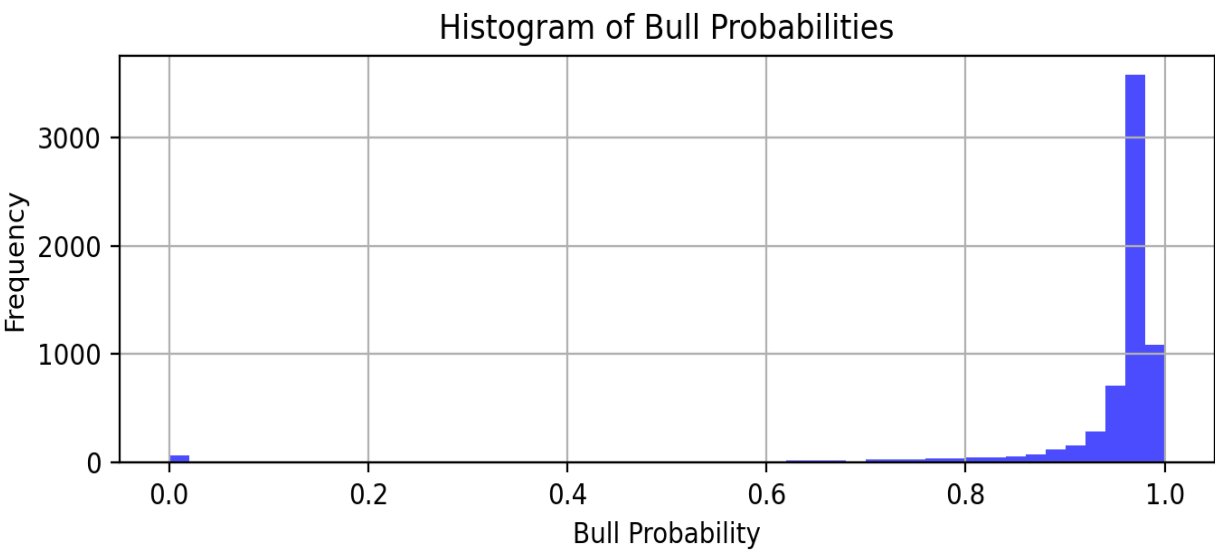
JPM Close with Hidden States



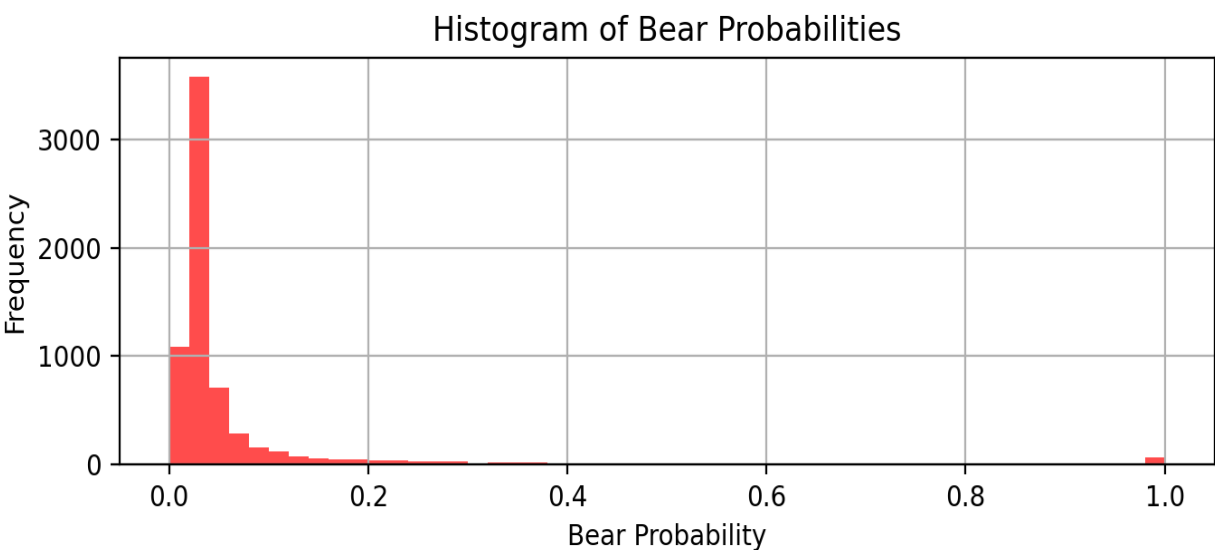
JPM Cumulative Returns



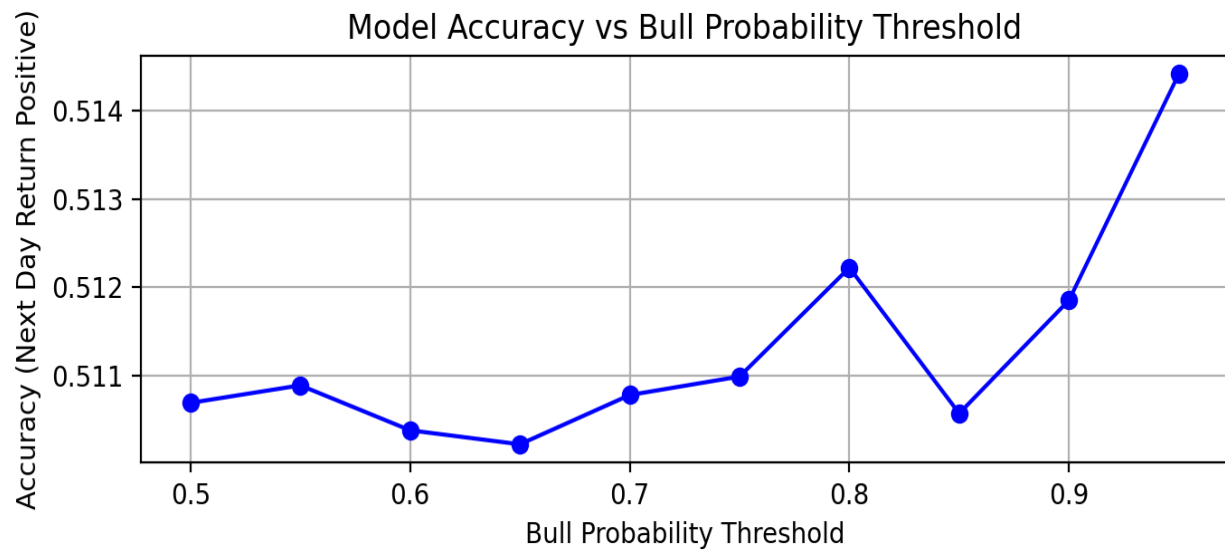
**Histogram of Bull Probabilities**



**Histogram of Bear Probabilities**



**Model Accuracy vs Bull Probability Threshold**



### Model Accuracy vs Bear Probability Threshold

