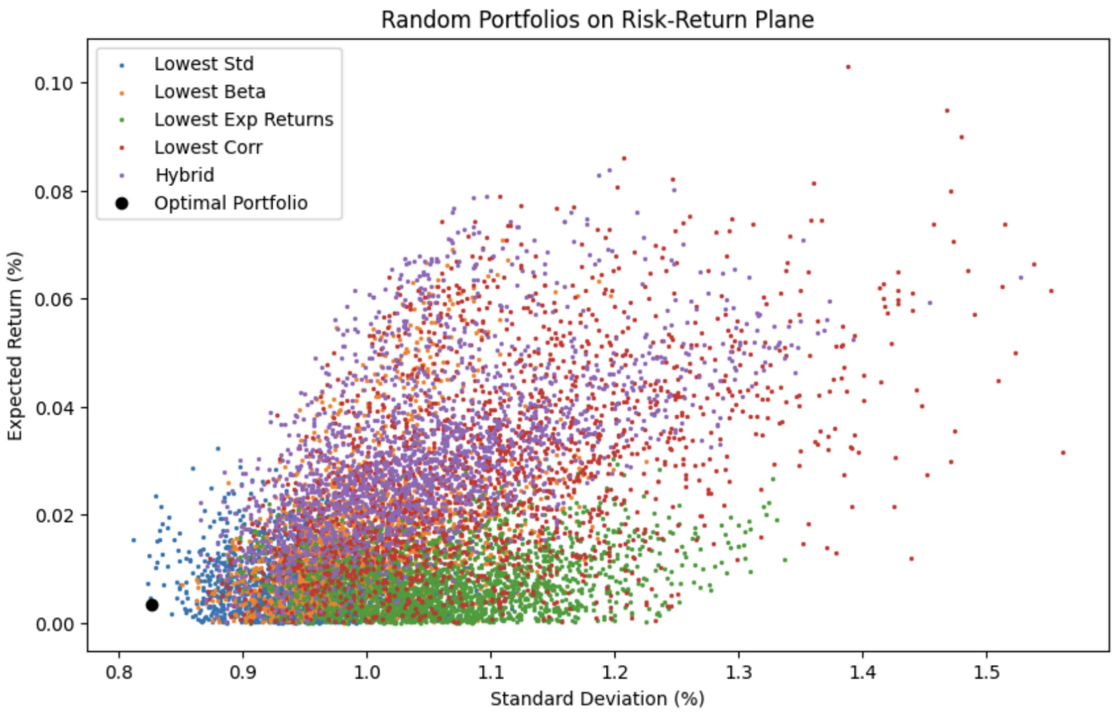
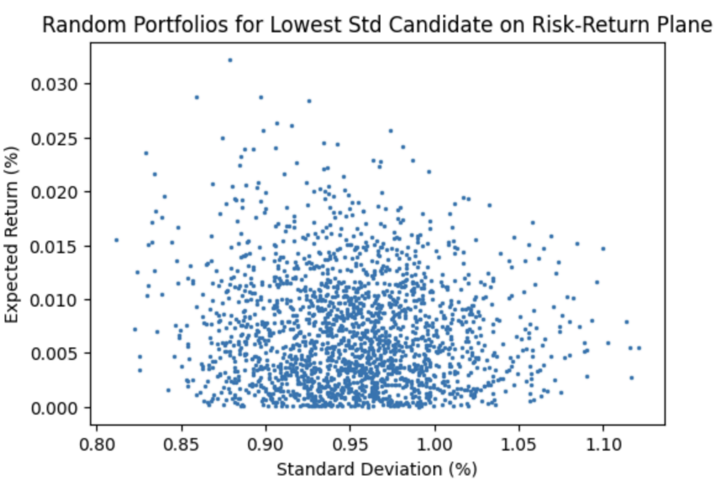
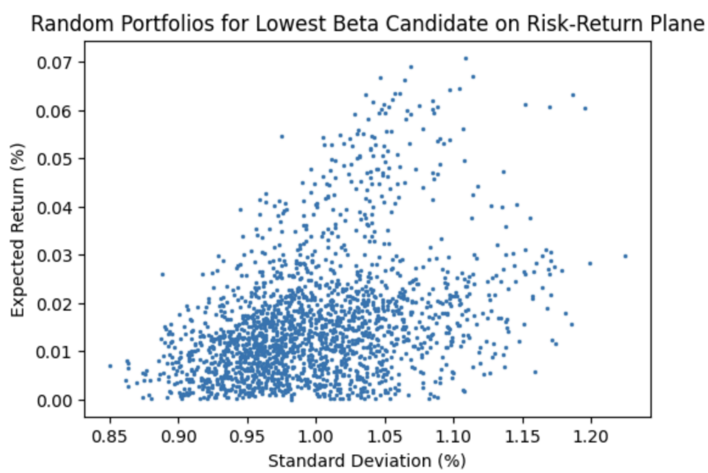
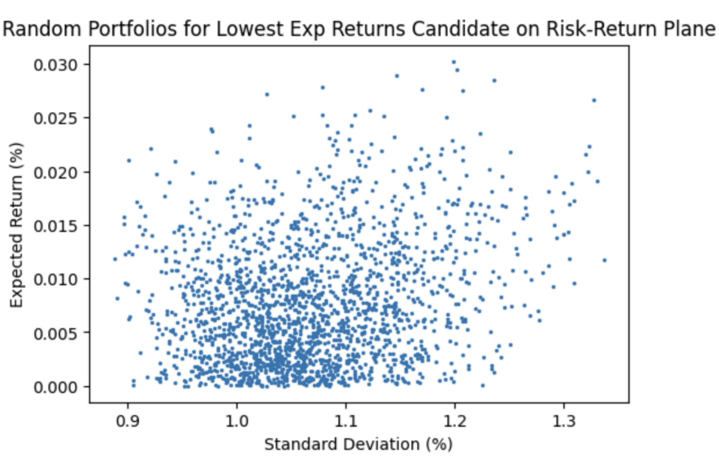
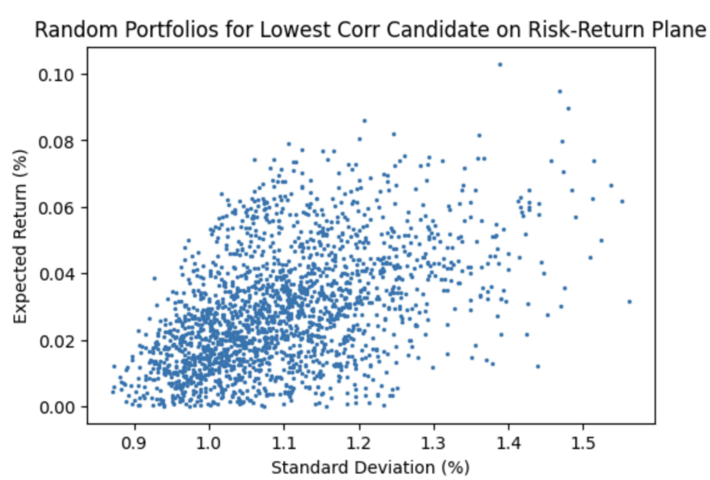
The following screenshots showcase *Matplotlib visualizations* designed to analyze the risk and return profiles of various stock portfolios and individual stocks, based on factors like standard deviation and correlation. These visualizations were key in evaluating performance trends, volatility, and financial metrics, supporting data-driven insights into portfolio risk management and return optimization.

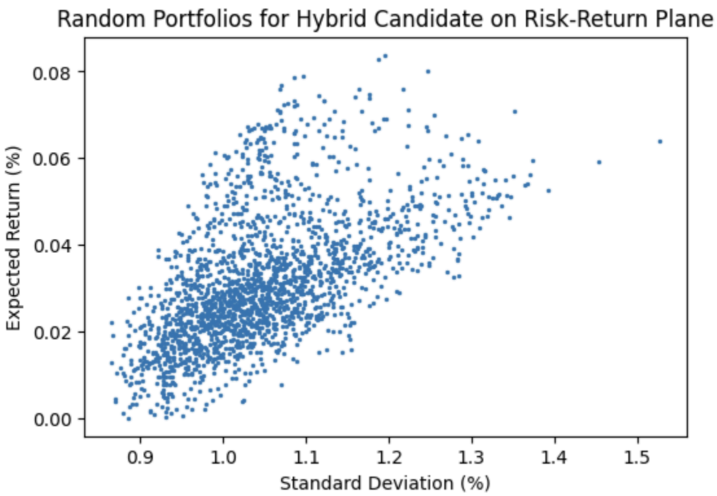


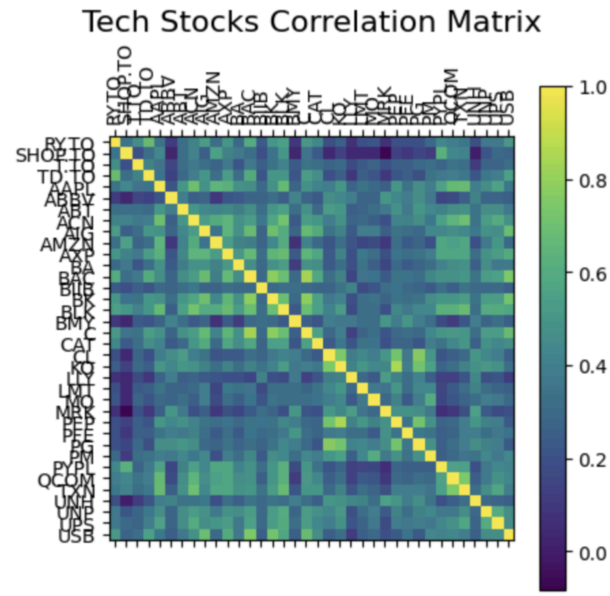


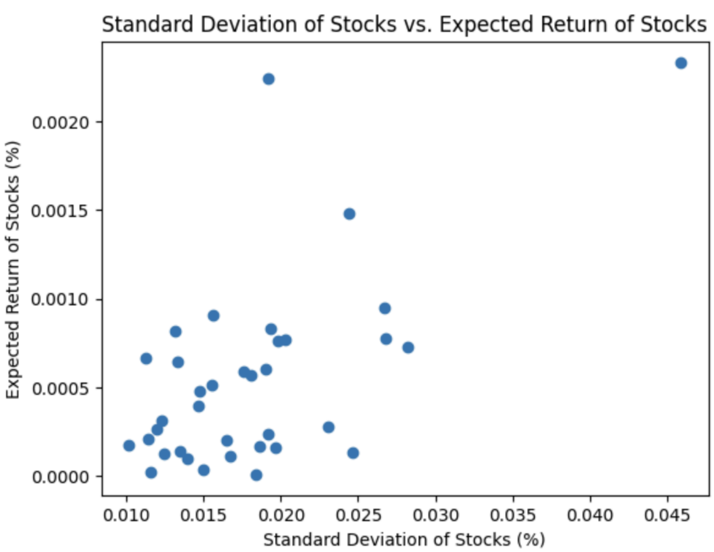


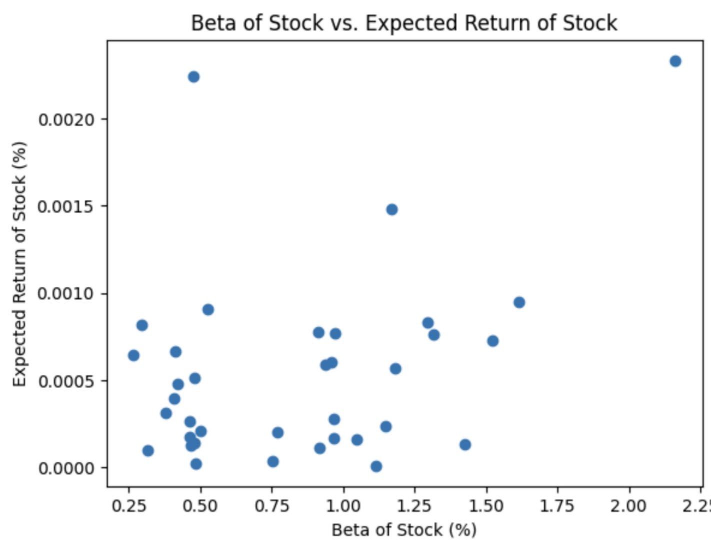





Random Portfolios for Hybrid Candidate on Risk-Return Plane
Expected Return (%)
Standard Deviation (%)


Tech Stocks Correlation Matrix


Standard Deviation of Stocks vs. Expected Return of Stocks
Expected Return of Stocks (%)
Standard Deviation of Stocks (%)


Beta of Stock vs. Expected Return of Stock
Expected Return of Stock (%)
Beta of Stock (%)