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Using genetic algorithms to search for an optimal investment strategy EDWARD MANDERE, HAOWEN XI, Bowling Green State University — In this experiment we used genetic algorithms to search for an investment strategy by dividing capital among different stocks with varying returns. The algorithm involves having a “manager” who divides his capital among various “experts” each of whom has a simple investment strategy. The expert strategies act like genes, experiencing mutation and crossover, in a selection process using previous returns as the fitness function. When algorithm was run with test data where the optimal strategy favored non-uniform investment in one stock it consistently beat a simple buy hold. However when the algorithm was run on actual stock data the system overwhelmingly stabilized at a population that closely resembled a simple buy hold portfolio, that is, evenly distribute the capital among all stocks.

Prefer Oral Session
 Prefer Poster Session

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