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I am pleased to write this letter on behalf of Yaoyao Clare Duan. I have been Clare's supervisor on the research project : A Multi-objective Approach to Portfolio *Optimization.* Clare completed this project during her senior year at Boston College. The culmination of this project has been a research paper. The paper *A Multi-objective Approach to Portfolio Optimization* has been entirely researched and written by Clare. The article is an original analysis of multi-objective optimization on portfolio investment problems. Typically portfolio optimization problems are solved using single objective optimization methods. Clare by using convex analysis has extended the portfolio optimization model to simultaneously optimizing two objectives: portfolio risk and return. She has integrated various optimization models into one general model to accomplish this goal. Her approach is both analytical and numerical which differs from previous work in portfolio optimization. Clare has proven that her optimization model produces the same results in the case of single objective optimization (mean variance) analysis by the Nobel Prize winner Harry Markowitz. Clare's research results enable investors to simultaneously approach portfolio analysis in broader perspective in terms of both optimizing risk and return. Her paper is well-organized and clearly written. This is an exceptional research project conducted by an undergraduate.

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