

Financial Engineering Problem Statement

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Where Innovation Is Tradition

Problem Definition

- Options investment strategies that are modeled rigorously are usually proprietary and are the efforts of many resources.
 - Fund managers usually rely on intuition and experience
 - Systems/OR specific approach to modeling optimal options investment is desired
- Determine an optimal options investment strategy using puts, calls, etc.
 - Balance aggressive investment against catastrophic loss
- Extend previous projects' results
 - Develop and appropriately incorporate more realistic assumptions upon which model is based
 - Engineer analytical performance model to predict/estimate performance over longer periods of time
 - Either determine new strategy or extend existing strategies

Going Forward

- Meet with our sponsor, Dr. Chang
 - Participate in Financial Engineering course
- Review previous projects and results
 - Determine our project scope
 - Possible extensions to previous work vs alternate trading models