WinORS Feature List

Financial Analytics

Capital Budgeting

- Ranking of budget on naïve measures
- Policy constraint wizard
- Optimal budget formulation based on policy constraints

Portfolio Analysis

- Portfolio Analysis with near Real-time Pricing
- Portfolio Optimization – Quadratic, Hierarchical Goal
- Environmental, Social, and Governance Factors
- Drawdowns
- Performance measures

Option & Futures -- Simulation with near Real-time pricing

- European and American pricing models
- Index, Equity, Futures, and Currency option models
- Auto compute 34 Simple and advanced strategies
- User defined strategy
- Breakeven analysis
- Probability of Touch
- Implied Volatility simulations
- VaR and CVaR

Hedging

- Micro hedge
- Macro hedge
- Shortselling

Coming Soon

- Robust Optimization
- Bank Financial Statement Analysis (with pro-forma)
- Industrial Financial Statement Analysis (with pro-forma)
- Arbitrage Pricing Theory
- Event Study Template
- Indicator Series

Statistical Methods

Descriptive Statistics

- Simple statistics
- Moments
- Normality tests
- Correlation and covariance with significance tests

Forecasting

- Simple Moving Average
- Linear Moving Average
- Exponential Moving Average
- Unadjusted (simple) Exponential Smoothing
- Brown's Exponential Smoothing
- Adaptive Rate of Response Single Exponential Smoothing
- Holt's Exponential Smoothing
- Winters Exponential Smoothing

Regression

- Ordinary Least Squares (OLS) Regression
- Multivariate Regression
- Polynomial Regression
- Stepwise Regression
- Logit Regression
- Probit Regression

Time series

- ARMA
- ARIMA

Coming Soon

- Maximum Likelihood Regression
- Method of Moments Regression
- PCA
- Factor Analysis with rotation methods
- Factor scores
- ICA

AI Methods

Back Propagation

Kohonen Maps

Radial Basis Artificial Neural Networks

- Iterative Global Ridge
- Closed form solution models
- Regularization methods
- Choice of error minimization rules
- Choice of transfer functions
- Out of sample forecasting
- Rolling forecasts

Coming Soon

- Genetic algorithm optimization

Constrained Optimization

Uniobjective

- Simple Assignment and Transportation model
- Linear Programming (automatically create the dual version of the problem)
- Quadratic Programming
- Integer Programming
- Zero-One Programming
- Mixed Integer Programming

Multiobjective

- Linear Goal Programming
- Nonlinear Goal Programming
- Linear Goal Mixed Integer Programming
- Non-linear Goal Mixed Integer Programming

Applications

- Bank Asset-Liability Optimization Model
- Portfolio Models
  - Markowitz
  - Sharpe (Single, Multi-Index, and Lambda models)
  - Fama and French Models