

MGMT 638

Session 6

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Agenda

1. Machine learning and asset pricing paper
2. More random forests
3. Creating Quality Minus Junk characteristics

Machine Learning and Asset Pricing

- PDF: *Hedge Funds and Public Information*, Crane, Crotty, and Umar, 2023
- Video: *Hedge Funds and Public Information*, Crane, Crotty, and Umar 2023
- NotebookLM

More Random Forests

- Ask Claude to get the California housing price dataset and to describe it.
- Ask Claude to do a train/test split and fit a random forest on the training data to predict house prices.
- Ask Claude to evaluate performance on the test data.
- Ask Claude to vary the maximum depth and to display performance on the training and test data.

Create Quality Minus Junk Variables

- See Session1/Quality Minus Junk for link to paper
- See Session3/Workflow for procedure to follow
- Important: create all growth rates of ratios or other fundamental variables before merging with returns