Decision Trees Pruning

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- Solution: Pruning to control model complexity

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- Minimum samples per split: Don't split if node has < N samples
- Minimum samples per leaf: Ensure each leaf has ≥ M samples
- Maximum features: Consider only subset of features at each split
- Minimum impurity decrease: Only split if improvement > threshold

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Grow full tree, then remove unnecessary branches:

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 - 5. Use cross-validation to select optimal lpha

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- Cross-validation: Essential for finding this balance

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- Domain knowledge: Consider interpretability requirements