Forest Cover Type Prediction

Objective

Build a system that can predict the type of forest cover using analysis data for a 30m x 30m patch of land in the forest

Dataset

This dataset is an analysis dataset from the forest department performed in the Roosevelt National Forest of northern Colorado.

Integer Classification of the forest cover types:

- 1 - Spruce/Fir
- 2 - Lodgepole Pine
- 3 - Ponderosa Pine
- 4 - Cottonwood/Willow
- 5 - Aspen
- 6 - Douglas-fir
- 7 - Krummholz

Description of main columns:

- Elevation - Elevation in meters
- Aspect - Aspect in degrees azimuth
- Slope - Slope in degrees
- Horizontal_Distance_To_Hydrology - Horz Dist to nearest surface water features
- Vertical_Distance_To_Hydrology - Vert Dist to nearest surface water features
- Horizontal_Distance_To_Roadways - Horz Dist to nearest roadway
- Hillshade_9am (0 to 255 index) - Hillshade index at 9am, summer solstice
- Hillshade_Noon (0 to 255 index) - Hillshade index at noon, summer solstice
- Hillshade_3pm (0 to 255 index) - Hillshade index at 3pm, summer solstice
- Horizontal_Distance_To_Fire_Points - Horz Dist to nearest wildfire ignition points
- Wilderness_Area (4 binary columns, 0 = absence or 1 = presence) - Wilderness area designation
- Soil_Type (40 binary columns, 0 = absence or 1 = presence) - Soil Type designation
- Cover_Type - Forest Cover Type designation