

Module 14: Model Selection and Boosting

Case Study – 1

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Domain – Chemical Industry

focus – Classify chemical

Business challenge/requirement

FuPont is a leading chemical company across the globe. The Company is on a CSR (Corporate Social Responsibility) mission. It wants to identify biodegradable products based on a study of the relationships between chemical structure and biodegradation of molecules.

You as an ML expert have to create an ML model to classify the chemical structure as 'Ready BioDegradable' – RB vs 'Not Ready Biodegradable' – NRB

Key issues

Data has lots of attributes and classification could be tricky

Considerations

NONE

Data volume

- Approx 1055 records – file bio-degradabale-data.csv

Fields in Data

- Details in .ipynb notebook

Additional information

- NA

Business benefits

Research can lead FuPont to create truly unique Biodegradable packaging material. This could lead to massive profits in future