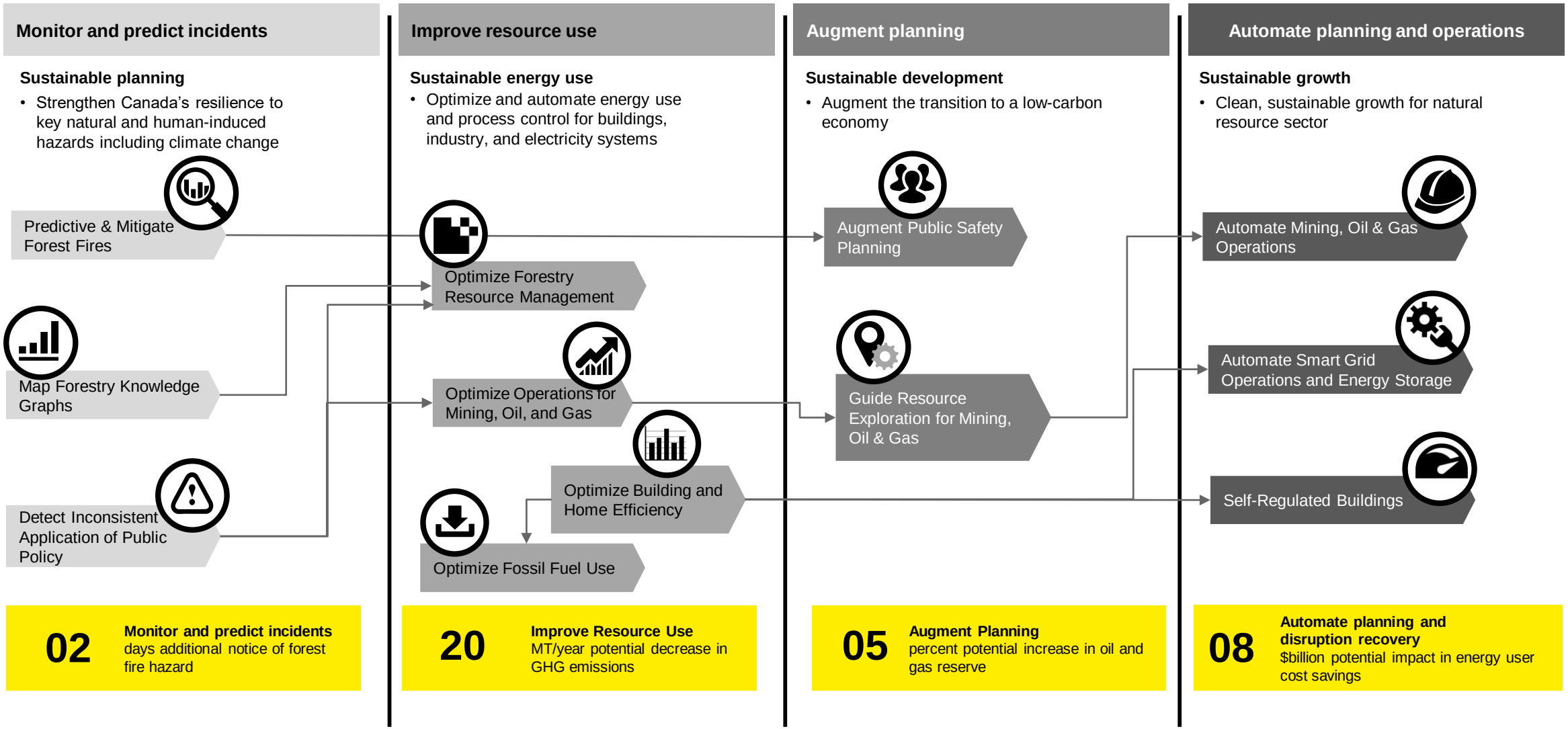
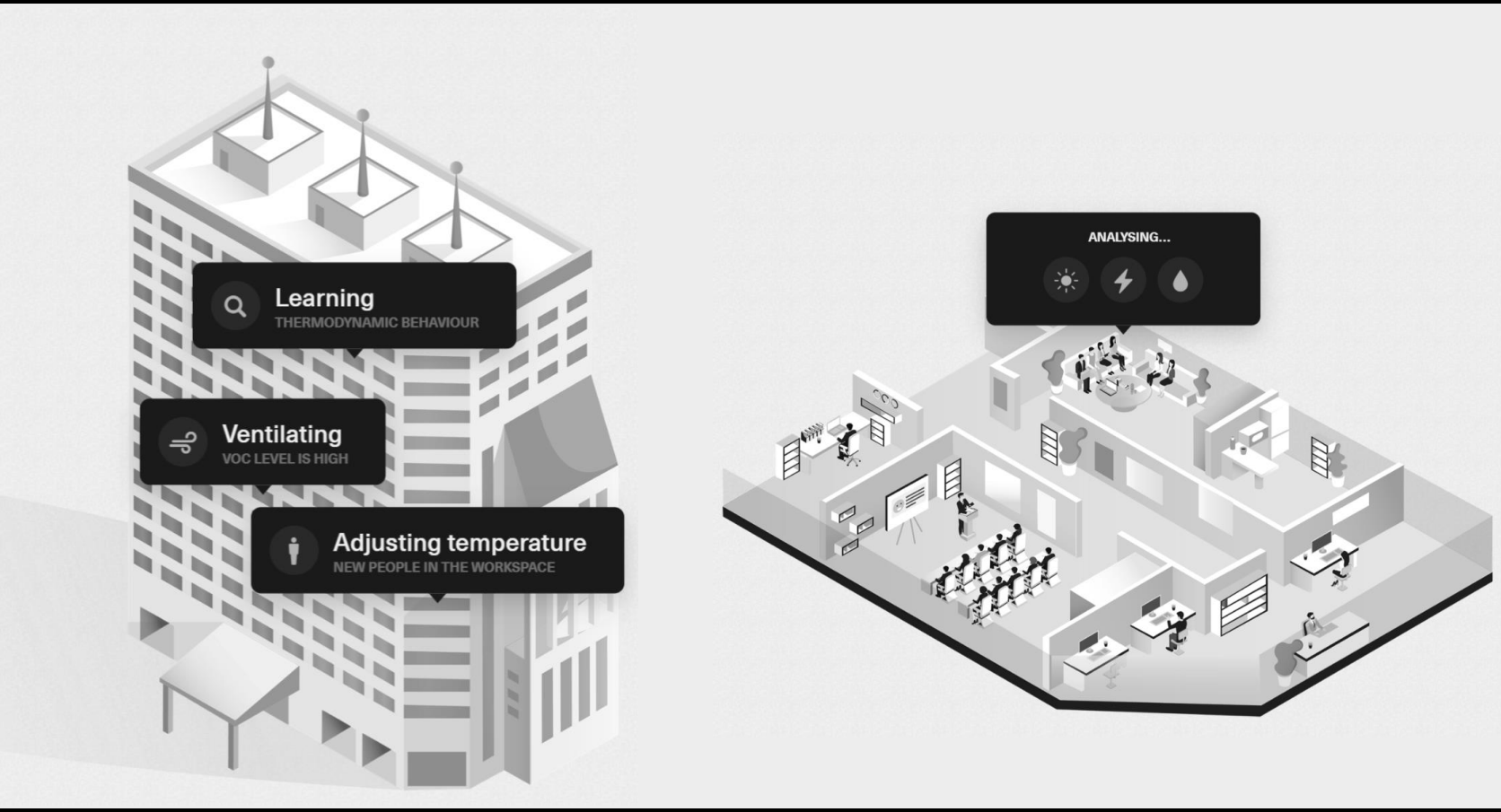
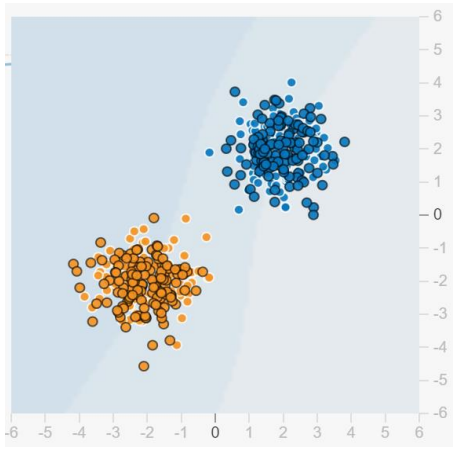
Example Forum Projects/Topics



The “Self-Driving” Building



These graphs represent datasets that record patterns of energy-efficient device usage. The challenge is to create and train a neural network to recognize these patterns and correctly decide when to power on a device.

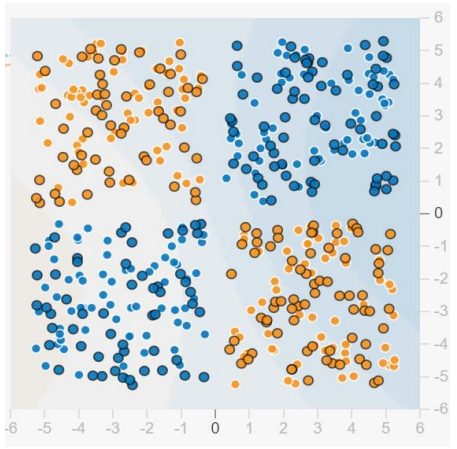


Scenario 1

Difficulty: Easy

Learn simple patterns for activating or deactivating devices at a particular times.

Turn the lights off ever day at 7:00 PM

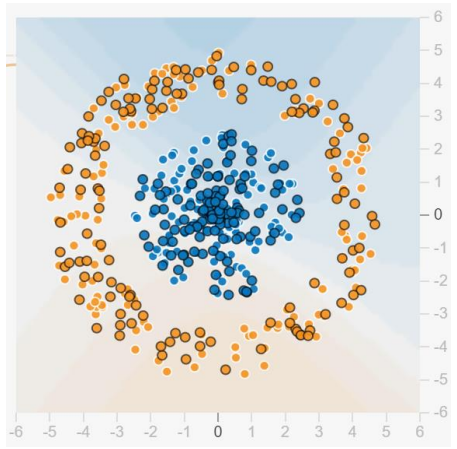


Scenario 2

Difficulty: Moderate

Learn to regulate devices based on static patterns of use over time.

Run the coffee maker from 6:00 AM to 9:00 AM. Turn the lights on at 6:00 AM and off at 7:00 PM

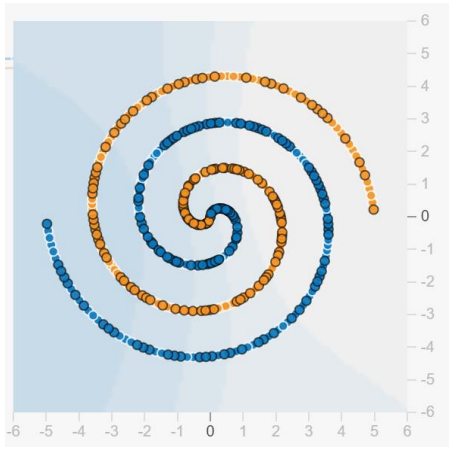


Scenario 3

Difficulty: Challenging

Learn to regulate devices based on simple, dynamic patterns of use over time.

Power up the conference room WiFi hubs in the middle of the day, and power them down at the beginning and end. Activate the mobile device charging ports in the middle of the day and power them down at the end.



Scenario 4

Difficulty: Difficult

Learn to regulate devices based on complex, dynamic patterns of use over time.

Power up the executive conference room on the morning of the first Monday of each month (the board meeting). Power up the west-facing conference rooms at the beginning of the day, and the east-facing conference rooms at the end of the day.

Legend Increase power Decrease power