

A decorative graphic on the left side of the slide, consisting of a network of light blue lines and small circles, resembling a circuit board or a neural network diagram. The lines are vertical and horizontal, with some diagonal connections, and the circles are placed at various points along these lines.

L1 NORMALISATION

PROBLEM

- Selecting critical features to be used in a *Machine Learning Model*
- Mostly hand-selected by developers
- Relative importance of these attributes is unknown
- Overfitting

PROBLEM: OVERFITTING

- “The production of an analysis which corresponds too closely or exactly to a particular set of data, and may therefore fail to fir additional data or predict future observations reliably.”
- “An overfitted model is a statistical model that contains more parameters than can be justified by the data.”

A WAY TO FIX IT: REGULARISATION

- Adding information
- Artificially discourages complex equations and solutions.
- The most common types of regularisation are L2 and L1 Norm.
- The core idea remains the same, the only difference comes in the way one adds a penalty system in the loss function.
- We bias the values of data towards lower bounds, by adding a penalty term.

SOLUTION

- This tells us that the 'Age' attribute is more significant to the model than 'Temp of Water'

