

FLIGHT DELAY PREDICTION

Rithik Sanjay Bawane

Consulting and Analytics Club

Introduction

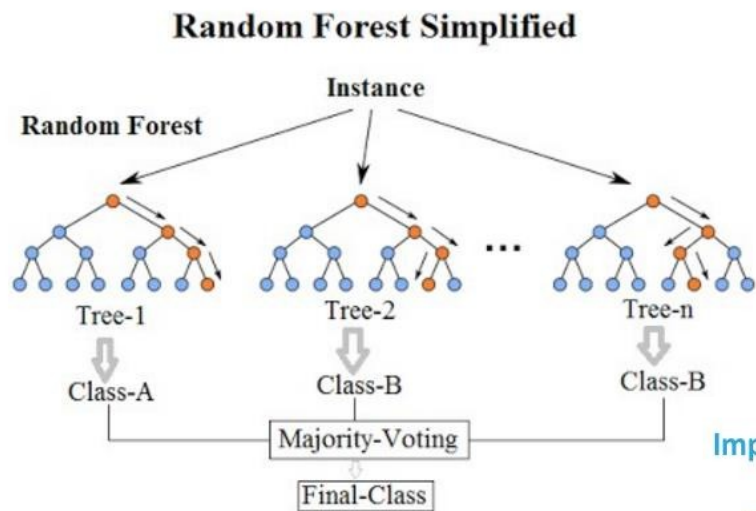
Flight ticket knows how unexpectedly the using sophisticated tactics which they

is currently the 3rd largest civil aviation IATA (International Air Transport) globally could double to 8.2 billion

g world **time management** has become operations. We can't afford to lose time is as motivation we have developed a flight delay based on various factors that line trend, air trafficetc.

Weather
Volume
Equipment
Runway
Other

It is clearly visible from the pie chart that **weather** is one of the most prominent factors causing delay, hence we have extracted weather features separately.



What is Impurity in Random Forest ?

The **impurity** of a node is the probability that a randomly chosen sample in a node would be **incorrectly** labeled if it was labeled by the distribution of samples in the node.

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$$H = -\sum_{i=1}^n p_i \log_2 p_i$$

cloud



Result

After careful hyperparameter tuning by F
Validation and application of various ML