# **Simple Random Sampling**

Graphical user interface, application

Description automatically generated A picture containing diagram

Description automatically generated  
Text

Description automatically generated with medium confidence

# **Systematic Sampling**

Graphical user interface

Description automatically generated  
Diagram, shape

Description automatically generated

# **Clustered Sampling** Text Description automatically generated

Graphical user interface

Description automatically generatedA picture containing graphical user interface

Description automatically generated

Icon

Description automatically generated with low confidence

# **Stratified Sampling** Text Description automatically generated with medium confidenceText Description automatically generated

Graphical user interface, diagram

Description automatically generated

All these are strata’s  
Diagram

Description automatically generated

Text

Description automatically generated

Dealing with im-balance data-set  
Random Sampling

Text

Description automatically generated

## **Random Over-Sampling**

## **Random Under-Sampling**

A picture containing text, whiteboard

Description automatically generated

A picture containing text

Description automatically generated

Oversampling 🡪 Increasing the minority classes  
Undersampling 🡪 Reduce the majority class

How will we increase the minority class ???

# references

<https://www.youtube.com/watch?v=KLAEwukvuZs>

<https://www.datasciencecentral.com/profiles/blogs/difference-between-stratified-sampling-cluster-sampling-and-quota>

<https://machinelearningmastery.com/random-oversampling-and-undersampling-for-imbalanced-classification/>