Alzheimer’s Disease prediction

AD prediction using Multi-omics dataset.

Multi-omics:   
 The branches of science known informally as omics are various disciplines in biology whose names end in the suffix –omics. The usage of multiple disciplines in a concept is termed Multi-omics.

Multiomics is a approach where the data sets of different omic groups are combined during analysis. The different omic strategies employed during multiomics are genome, proteome, transcriptome, epigenome, and microbiome.

Dataset:  
 A **feature set** from Two Heterogeneous datasets are used, Differentially Expressed Gene: DEG\_Dataset (Gene Expression) and Differentially Methylated Position: DMP\_Dataset (DNA Methylation) for the Pre-frontal cortex of the brain of 257 healthy adults and 439 adults with Alzheimer’s disease (AD).  
  
The feature set:

Feature Selection:  
 The first elment is gene and the second is probing of CpG site from gene expression and DNA methylation.