

Locally:



<https://github.com/zx0223winer/AMRLearn>

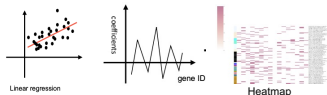
Preparing the scripts and file examples



~5 minutes

Linear regression model:

Suitable for Antimicrobial Susceptibility Testing (AST) data with specific diameters of the inhibition zones



~ 10 minutes

Step 1

**Dataset Pre-processing
Step 2 - 6**

**Machine learning
classification model
Step 9 - 10**

Step 7 - 8

**Machine learning
linear model**

~10 minutes

~ 10 minutes

Preparing the genotype and phenotype data

1. gbff2tab.py
2. vcfsnp.py
3. feature2target.py



Antibiotics

gene 1	gene 2
AGCTTTTCATGCTGCA	AGCATTACATGACTGCA
AGCATTACATGCTGCA	AGCTTTTCATGACTGCA
AGCATTACATGCTGCA	AGCTTTTCATGACTGCA

Variant callings

Classification model:

Suitable for minimum inhibitory concentration (MIC) data indicating resistance classification

Machine learning models



Deep learning models

