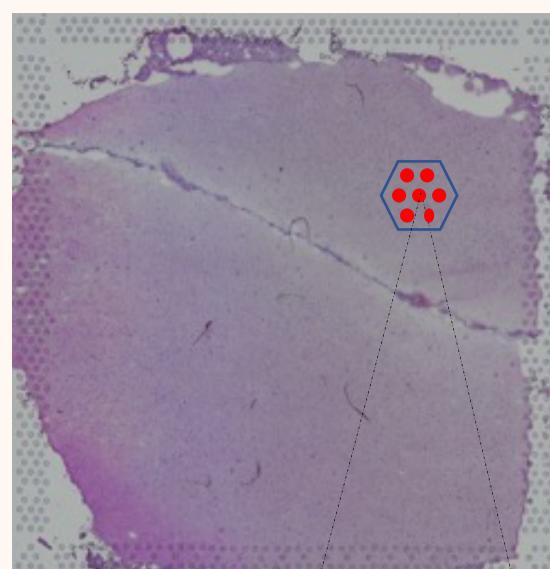
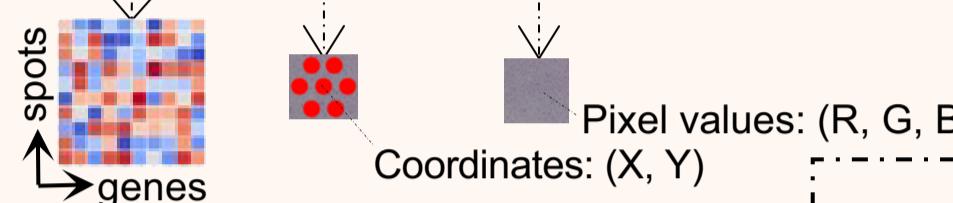


## Input ST data

Sequencing-based ST data  
Image-based ST data



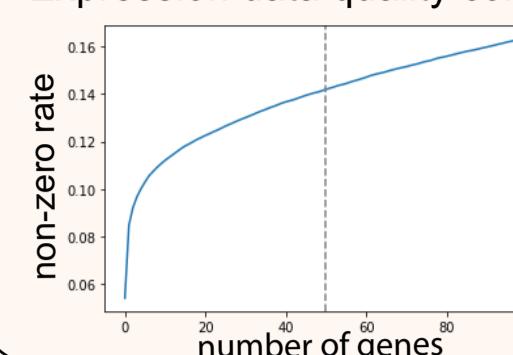
Expression profile  
Spatial location  
Image information



## Data Preprocessing ①

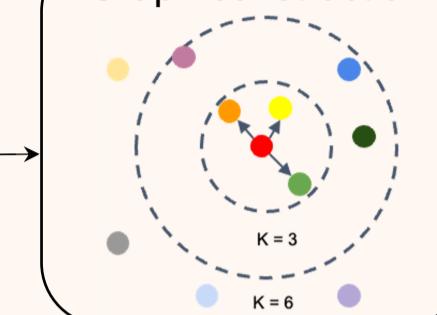
Expression profile

Expression data quality control



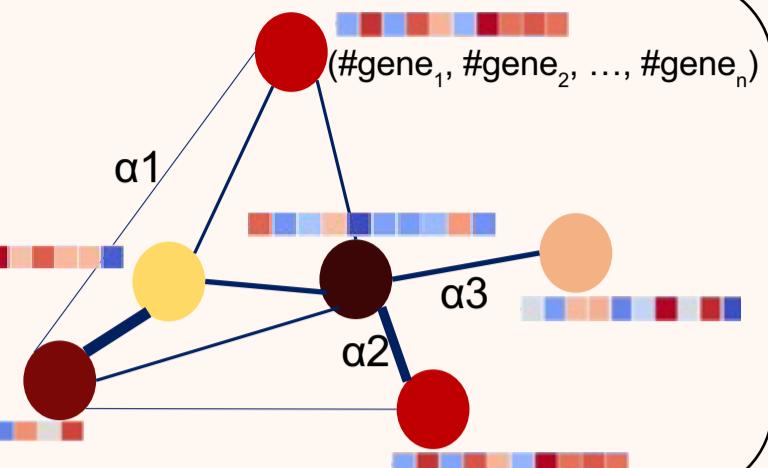
Spatial location

Graph construction



Construct node features

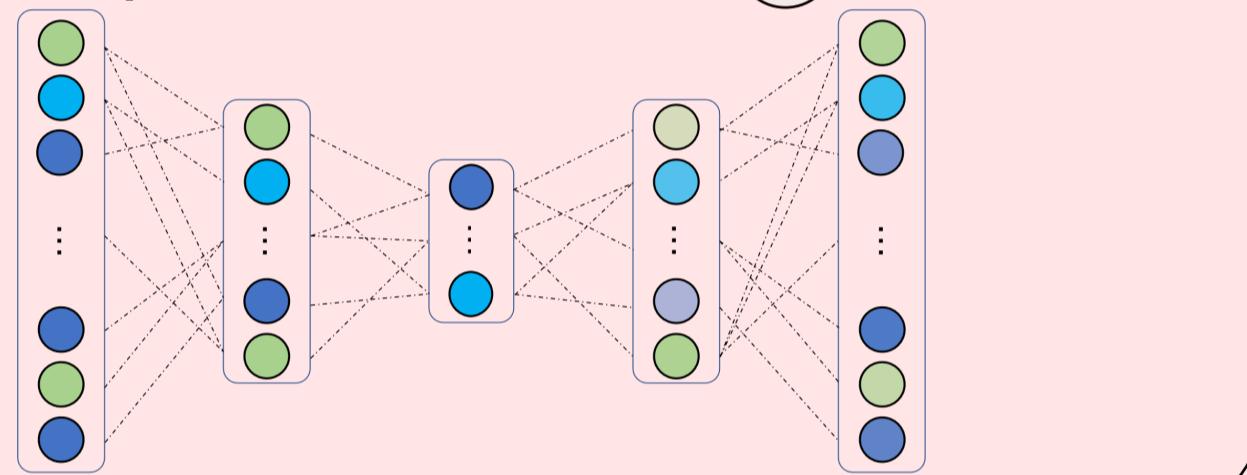
Construct graph edges



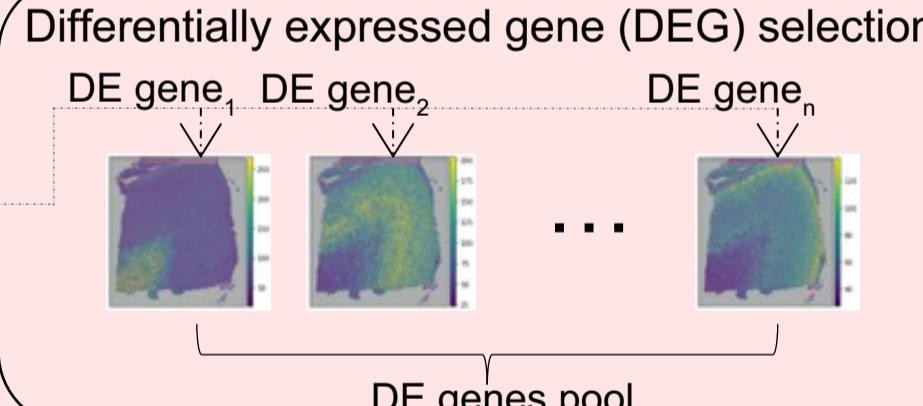
Model input

## ADEPT Backbone

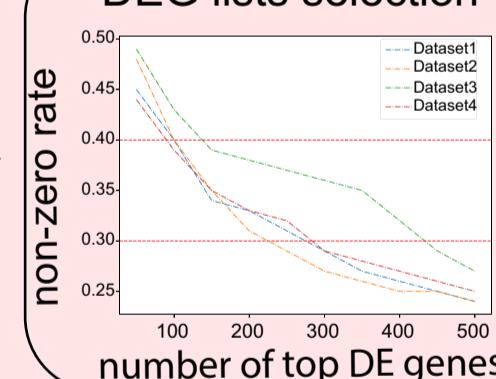
### Graph Autoencoder ②



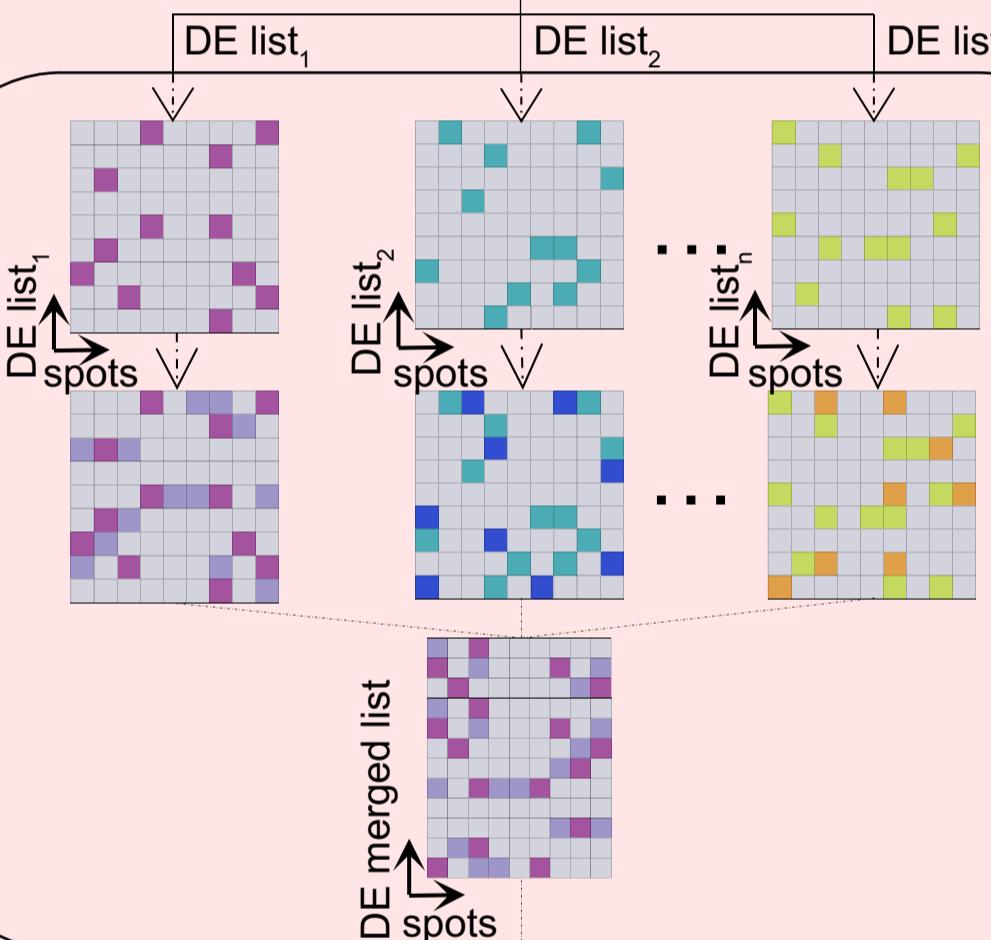
### Initial clustering ③



DEG lists selection



### Imputations ④



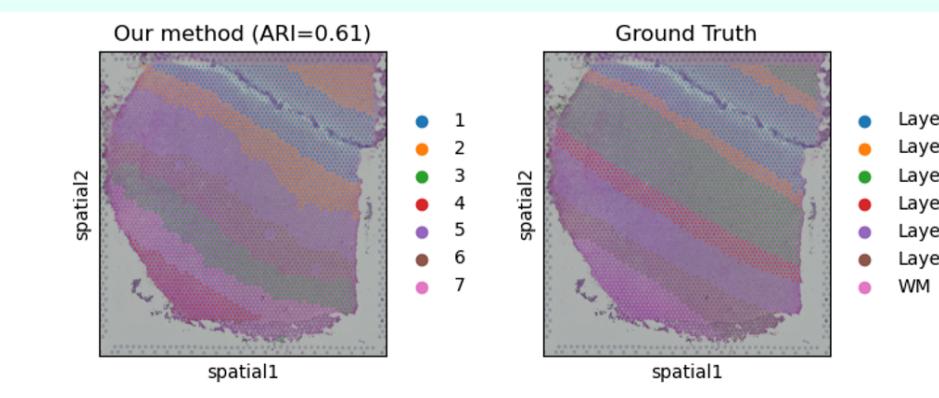
DE/Imputation Optimized

## Final clustering ⑤

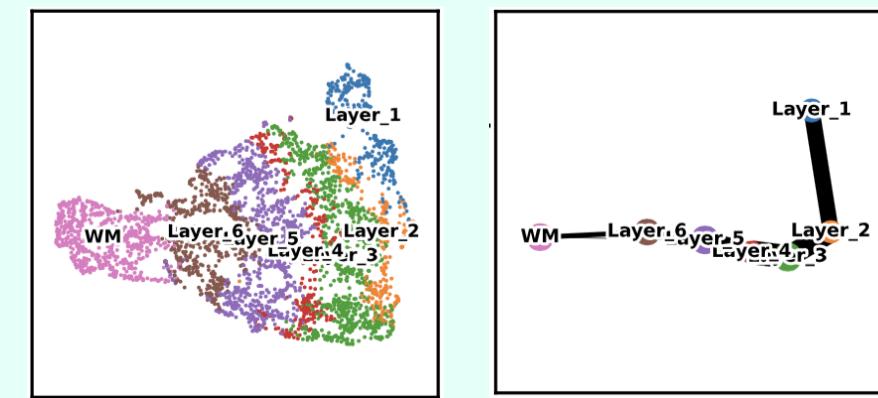
Applications

Downstream analysis

### Spatial domain identification



### Spatial trajectory inference



### ST matrix imputation

