

Tutorial of KokumiPD

Yi He, Aug 2023

1. Offline version deployment

1.1 Installation of python dependencies

```
numpy 1.24.3
rdkit 2023.3.2
torch 2.0.1+cpu
dgl 1.1.1
dglife 0.3.2
```

1.2 Run KokumiPD

```
python predictor.py
    -h, --help            show this help message and exit
    -t {0,1}, --type {0,1}
                        0 is Graph Neural Network (GNN) for predict kokumi/non-kokumi,
                        1 is Support Vector Machine (SVM) with 2D-fingerprint RDKFP as input
    -i FILE, --file FILE  input smiles file, don't have a header, only a column smiles
    -o OUT, --out OUT     output file
```

2. Webserver version deployment

2.1 MySQL

Dowload and install from <https://www.mysql.com/>
\$ mysql -u username -p password
> create database kokumi;

2.2 Django

Dowload and install from <https://www.djangoproject.com/>
Installation of python dependencies
\$ pip install djangorestframework
\$ pip install django-cors-headers
Configuring the database information in settings.py
Configuring the cross-domain information in settings.py
\$ python manage.py migrate
\$ python manage.py makemigrations
\$ python manage.py migrate
\$ python manage.py runserver

2.3 Vue

Dowload and install from <https://cn.vuejs.org/>
Configure your backend API
\$ npm run dev