

```

!unzip '/content/MNIST-dataset.zip'

Archive:  /content/MNIST-dataset.zip
inflating: mnist_test.csv
inflating: mnist_train.csv

model.save('models/mnistCNN.h5')

!tar-zcvf Digit-Model.tgz mnistCNN.h5

mnistCNN.h5

```

IBM DEPLOYMENT

```

!pip install watson-machine-learning-client

Looking in indexes: https://pypi.org/simple,
https://uspython.pkg.dev/colab-wheels/public/simple/
Collecting watson-machine-learning-client
  Downloading watson_machine_learning_client-1.0.391-py3-none-any.whl
(538 kB)
Requirement already satisfied: certifi in
/usr/local/lib/python3.7/dist-packages (from watson-machine-learning-
client) (2022.9.24)
Requirement already satisfied: requests in
/usr/local/lib/python3.7/dist-packages (from watson-machine-
learningclient) (2.23.0)
Requirement already satisfied: pandas in
/usr/local/lib/python3.7/dist-packages (from watson-machine-
learningclient) (1.3.5)
Requirement already satisfied: urllib3 in
/usr/local/lib/python3.7/dist-packages (from watson-machine-
learningclient) (1.24.3)
Requirement already satisfied: tabulate in
/usr/local/lib/python3.7/dist-packages (from watson-machine-
learningclient) (0.8.10)
Requirement already satisfied: tqdm in
/usr/local/lib/python3.7/dist-packages (from watson-machine-learning-
client) (4.64.1)
Collecting boto3
  Downloading boto3-1.26.7-py3-none-any.whl (132 kB)
on
  Downloading lomond-0.3.3-py2.py3-none-any.whl (35 kB)
Collecting ibm-cos-sdk
  Downloading ibm-cos-sdk-2.12.0.tar.gz (55 kB)
espath<2.0.0,>=0.7.1
  Downloading jmespath-1.0.1-py3-none-any.whl (20 kB)
Requirement already satisfied: python-dateutil<3.0.0,>=2.1 in
/usr/local/lib/python3.7/dist-packages (from botocore<1.30.0,>=1.29.7-
>boto3->watson-machine-learning-client) (2.8.2)

```

Collecting urllib3

Downloading urllib3-1.26.12-py2.py3-none-any.whl (140 kB)
ent already satisfied: six>=1.5 in /usr/local/lib/python3.7/dist-packages
(from python-dateutil<3.0.0,>=2.1->botocore<1.30.0,>=1.29.7->boto3->watson-machine-learning-client) (1.15.0)

Collecting ibm-cos-sdk-core==2.12.0

Downloading ibm-cos-sdk-core-2.12.0.tar.gz (956 kB) -cos-sdk-s3transfer==2.12.0

Downloading ibm-cos-sdk-s3transfer-2.12.0.tar.gz (135 kB)
espath<2.0.0,>=0.7.1

Downloading jmespath-0.10.0-py2.py3-none-any.whl (24 kB)

Collecting requests

Downloading requests-2.28.1-py3-none-any.whl (62 kB)
ent already satisfied: charset-normalizer<3,>=2 in
/usr/local/lib/python3.7/dist-packages (from requests->watson-machinelearning-client) (2.1.1)

Requirement already satisfied: idna<4,>=2.5 in
/usr/local/lib/python3.7/dist-packages (from requests->watson-machinelearning-client) (2.10)

Requirement already satisfied: pytz>=2017.3 in
/usr/local/lib/python3.7/dist-packages (from pandas->watson-machinelearning-client) (2022.6)

Requirement already satisfied: numpy>=1.17.3 in
/usr/local/lib/python3.7/dist-packages (from pandas->watson-machinelearning-client) (1.21.6)

Building wheels for collected packages: ibm-cos-sdk, ibm-cos-sdk-core, ibm-cos-sdk-s3transfer

Building wheel for ibm-cos-sdk (setup.py) ... -cos-sdk:
filename=ibm_cos_sdk-2.12.0-py3-none-any.whl size=73931
sha256=3c1e1853c51f05f29850f038c9879d9c48a399f50859c48457497e4a8f28909
f

Stored in directory:
/root/.cache/pip/wheels/ec/94/29/2b57327cf00664b6614304f7958abd29d77ea
0e5bbece2ea57

Building wheel for ibm-cos-sdk-core (setup.py) ... -cos-sdk-core:
filename=ibm_cos_sdk_core-2.12.0-py3-none-any.whl size=562962
sha256=8116a866228dbbcc99a7e659f48bb0c4d5eab0ae28835475b46b2bfddladcc62
7

Stored in directory:
/root/.cache/pip/wheels/64/56/fb/5cd6f4f40406c828a5289b95b2752a4d142a9
afb359244ed8d

Building wheel for ibm-cos-sdk-s3transfer (setup.py) ... -cos-sdks3transfer:
filename=ibm_cos_sdk_s3transfer-2.12.0-py3-none-any.whl size=89778
sha256=32d066a60d2aa32a01b138bbe4f6e582f05970a7b0b5d7d03208b869edfd85f
a

Stored in directory:
/root/.cache/pip/wheels/57/79/6a/ffe3370ed7ebc00604f9f76766e1e0348dc
ad2b2e32df9e1

Successfully built ibm-cos-sdk ibm-cos-sdk-core ibm-cos-sdk-s3transfer
Installing collected packages: urllib3, requests, jmespath, ibm-
cos-sdk-core, botocore, s3transfer, ibm-cos-sdk-s3transfer, lomond,
ibm-

cos-sdk, boto3, watson-machine-learning-client

Attempting uninstall: urllib3

Found existing installation: urllib3 1.24.3

Uninstalling urllib3-1.24.3:

Successfully uninstalled urllib3-1.24.3

Attempting uninstall: requests

Found existing installation: requests 2.23.0

Uninstalling requests-2.23.0:

Successfully uninstalled requests-2.23.0

Successfully installed boto3-1.26.7 botocore-1.29.7 ibm-cos-sdk-2.12.0
ibm-cos-sdk-core-2.12.0 ibm-cos-sdk-s3transfer-2.12.0 jmespath-0.10.0
lomond-0.3.3 requests-2.28.1 s3transfer-0.6.0 urllib3-1.26.12
watsonmachine-learning-client-1.0.391

```
{"pip_warning":{"packages":["requests","urllib3"]}}
```

```
!pip install ibm_watson_machine_learning
```

Looking in indexes: <https://pypi.org/simple>,
<https://uspython.pkg.dev/colab-wheels/public/simple/>
Collecting ibm_watson_machine_learning

Downloading ibm_watson_machine_learning-1.0.257-py3-none-any.whl
(1.8 MB)

Requirement already satisfied: pandas<1.5.0,>=0.24.2 in
/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (1.3.5)

Requirement already satisfied: importlib-metadata in
/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (4.13.0) Requirement
already satisfied: requests in

/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (2.28.1) Requirement

already satisfied: certifi in
/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (2022.9.24) Requirement
already satisfied: tabulate in

/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (0.8.10)

Collecting ibm-cos-sdk==2.7.*

Downloading ibm-cos-sdk-2.7.0.tar.gz (51 kB)

Requirement already satisfied: urllib3 in /usr/local/lib/python3.7/dist-
packages (from ibm_watson_machine_learning) (1.26.12)

Requirement already satisfied: packaging in
/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (21.3)

```

Requirement already satisfied: lomond in
/usr/local/lib/python3.7/dist-packages (from
ibm_watson_machine_learning) (0.3.3)
Collecting ibm-cos-sdk-core==2.7.0
  Downloading ibm-cos-sdk-core-2.7.0.tar.gz (824 kB)
-cos-sdk-s3transfer==2.7.0
  Downloading ibm-cos-sdk-s3transfer-2.7.0.tar.gz (133 kB)
ent already satisfied: jmespath<1.0.0,>=0.7.1 in
/usr/local/lib/python3.7/dist-packages (from ibm-cos-sdk==2.7.*-
>ibm_watson_machine_learning) (0.10.0)
Collecting docutils<0.16,>=0.10
  Downloading docutils-0.15.2-py3-none-any.whl (547 kB)
ent already satisfied: python-dateutil<3.0.0,>=2.1 in
/usr/local/lib/python3.7/dist-packages (from ibm-cos-sdk-core==2.7.0-
>ibm-cos-sdk==2.7.*->ibm_watson_machine_learning) (2.8.2)
Requirement already satisfied: numpy>=1.17.3 in
/usr/local/lib/python3.7/dist-packages (from pandas<1.5.0,>=0.24.2-
>ibm_watson_machine_learning) (1.21.6)
Requirement already satisfied: pytz>=2017.3 in
/usr/local/lib/python3.7/dist-packages (from pandas<1.5.0,>=0.24.2-
>ibm_watson_machine_learning) (2022.6)
Requirement already satisfied: six>=1.5 in
/usr/local/lib/python3.7/dist-packages (from python-
dateutil<3.0.0,>=2.1->ibm-cos-sdk-core==2.7.0->ibm-cos-sdk==2.7.*-
>ibm_watson_machine_learning) (1.15.0)
Requirement already satisfied: idna<4,>=2.5 in
/usr/local/lib/python3.7/dist-packages (from requests-
>ibm_watson_machine_learning) (2.10)
Requirement already satisfied: charset-normalizer<3,>=2 in
/usr/local/lib/python3.7/dist-packages (from requests-
>ibm_watson_machine_learning) (2.1.1)
Requirement already satisfied: typing-extensions>=3.6.4 in
/usr/local/lib/python3.7/dist-packages (from importlib-metadata-
>ibm_watson_machine_learning) (4.1.1)
Requirement already satisfied: zipp>=0.5 in
/usr/local/lib/python3.7/dist-packages (from importlib-metadata-
>ibm_watson_machine_learning) (3.10.0)
Requirement already satisfied: pyparsing!=3.0.5,>=2.0.2 in
/usr/local/lib/python3.7/dist-packages (from packaging-
>ibm_watson_machine_learning) (3.0.9)
Building wheels for collected packages: ibm-cos-sdk, ibm-cos-sdk-core,
ibm-cos-sdk-s3transfer
  Building wheel for ibm-cos-sdk (setup.py) ... -cos-sdk:
filename=ibm_cos_sdk-2.7.0-py2.py3-none-any.whl size=72563
sha256=3ebe2a9d09b12b8064775dedf9a38065f8e4381582d089b8c90a5b900959d9a
8
  Stored in directory:

```

```
/root/.cache/pip/wheels/47/22/bf/e1154ff0f5de93cc477acd0ca69abfbb8b799c5b28a66b44c2
```

```
Building wheel for ibm-cos-sdk-core (setup.py) ... -cos-sdk-core:
filename=ibm_cos_sdk_core-2.7.0-py2.py3-none-any.whl size=501013
sha256=802d2cc970bc4cd21cc2fb09e0090a13bd007e6015cb73be3287a6ec3a38ba08
```

```
Stored in directory:
```

```
/root/.cache/pip/wheels/6c/a2/e4/c16d02f809a3ea998e17cfd02c13369281f3d232aaf5902c19
```

```
Building wheel for ibm-cos-sdk-s3transfer (setup.py) ... -cos-
s3transfer: filename=ibm_cos_sdk_s3transfer-2.7.0-py2.py3-none-
any.whl size=88622
sha256=c6d8e63250659b8136cf5d444b659ff39cd7ffc14609f6afa434559cfd4b1642
```

```
Stored in directory:
```

```
/root/.cache/pip/wheels/5f/b7/14/fbe02bc1ef1af890650c7e51743d1c83890852e598d164b9da
```

```
Successfully built ibm-cos-sdk ibm-cos-sdk-core ibm-cos-sdk-s3transfer
Installing collected packages: docutils, ibm-cos-sdk-core, ibm-cos-sdk-s3transfer, ibm-cos-sdk, ibm-watson-machine-learning
```

```
Attempting uninstall: docutils
```

```
Found existing installation: docutils 0.17.1
```

```
Uninstalling docutils-0.17.1:
```

```
Successfully uninstalled docutils-0.17.1
```

```
Attempting uninstall: ibm-cos-sdk-core
```

```
Found existing installation: ibm-cos-sdk-core 2.12.0
```

```
Uninstalling ibm-cos-sdk-core-2.12.0:
```

```
Successfully uninstalled ibm-cos-sdk-core-2.12.0
```

```
Attempting uninstall: ibm-cos-sdk-s3transfer
```

```
Found existing installation: ibm-cos-sdk-s3transfer 2.12.0
```

```
Uninstalling ibm-cos-sdk-s3transfer-2.12.0:
```

```
Successfully uninstalled ibm-cos-sdk-s3transfer-2.12.0
```

```
Attempting uninstall: ibm-cos-sdk
```

```
Found existing installation: ibm-cos-sdk 2.12.0
```

```
Uninstalling ibm-cos-sdk-2.12.0:
```

```
Successfully uninstalled ibm-cos-sdk-2.12.0
```

```
Successfully installed docutils-0.15.2 ibm-cos-sdk-2.7.0 ibm-cos-
sdksdkcore-2.7.0 ibm-cos-sdk-s3transfer-2.7.0 ibm-watson-machine-
learning-
1.0.257
```

```
from ibm_watson_machine_learning import APIClient
```

```
wml_credentials = {
```

```
    "url": "https://eu-gb.ml.cloud.ibm.com",
```

```
    "apikey": "jvy5eD0w7y5bbEqwjgb3hPV1qs6Um37N7J2ROWZBiPXY"
```

```
}
```

```
client=APIClient(wml_credentials)
```

```
client
```

Python 3.7 and 3.8 frameworks are deprecated and will be removed in a future release. Use Python 3.9 framework instead.

```
<ibm_watson_machine_learning.client.APIClient at 0x7f1e98449610>
```

```
client.spaces.get_details()
```

```
{'resources': [{ 'entity': { 'compute': [{ 'crn':  
'crn:v1:bluemix:public:pm-20:eu-gb:a/2a8885b5d5d04a1f8fe11f33c481e032:  
2c932db9-734f-487f-9ba1-27cc4f865682::',  
    'guid': '2c932db9-734f-487f-9ba1-27cc4f865682',  
    'name': 'Watson Machine Learning-ek',  
    'type': 'machine_learning'}]},  
  'description': '',  
  'name': 'Novel Method',  
  'scope': { 'bss_account_id': '2a8885b5d5d04a1f8fe11f33c481e032'},  
  'stage': { 'production': False},  
  'status': { 'state': 'active'},  
  'storage': { 'properties': { 'bucket_name': 'aa2c867a-281f-4f64-  
8ca5-1388462f3e8d',  
    'bucket_region': 'eu-gb-standard',  
    'credentials': { 'admin': { 'access_key_id':  
'69c872b8ebca43daa74910466b0163a0',  
    'api_key': 'jkKm0DaWpvTGWMfuKlBNRkktWcHaHMiCgmB8nPqbdgi3',  
    'secret_access_key':  
'4ef677aeaf64f2ac440a043ea60d79ac76dcd5d8e010ffaa',  
    'service_id': 'ServiceId-84b77ca1-d301-4871-af77-  
870dc7eec585'},  
    'editor': { 'access_key_id': '4a1ac6f50f2f44ac8682bf6fcb609f7f',  
    'api_key': 'hlilnp91zWNhJsFkTM5em1CvdKkMs2kx9RTXqIA5PQHd',  
    'resource_key_crn': 'crn:v1:bluemix:public:cloud-  
objectstorage:global:a/2a8885b5d5d04a1f8fe11f33c481e032:b10f964a-d050-  
4f34-  
8abe-e6491fa7c274::',  
    'secret_access_key':  
'47d0eeb49fefb40191540058934e1be2fcb2c4a92aebb163',  
    'service_id': 'ServiceId-52a4accd-6a2e-475c-a2fba4998077d07c'},  
    'viewer': { 'access_key_id': 'adac0672d47a49ad9e24078b1186ce7d',  
    'api_key': '_IkYjB8Jsa3Fny8uy7upC89pxmLvGYGskNQwf8LloC-o',  
    'resource_key_crn': 'crn:v1:bluemix:public:cloud-  
objectstorage:global:a/2a8885b5d5d04a1f8fe11f33c481e032:b10f964a-d050-  
4f34-  
8abe-e6491fa7c274::',  
    'secret_access_key':  
'c3547d671aaf42c1fd118d19617a7ce7cc361ad201f1296a',  
    'service_id': 'ServiceId-0bb060ab-b6e0-4d1a-900eb68e0e8c81eb'}}},  
    'endpoint_url': 'https://s3.eu-gb.cloud-  
objectstorage.appdomain.cloud',
```

```

        'guid': 'b10f964a-d050-4f34-8abe-e6491fa7c274',
        'resource_crn': 'crn:v1:bluemix:public:cloud-object-
storage:global:a/2a8885b5d5d04a1f8fe11f33c481e032:b10f964a-d050-4f34-
8abe-e6491fa7c274::'},
        'type': 'bmcos_object_storage'}}},
        'metadata': {'created_at': '2022-11-11T12:06:17.400Z',
        'creator_id': 'IBMid-665002L1U6',
        'id': 'c042954f-ef7e-44d4-ac6b-904b3f29ed31',
        'updated_at': '2022-11-11T12:06:31.638Z',
        'url': '/v2/spaces/c042954f-ef7e-44d4-ac6b-904b3f29ed31'}}]]}

```

```
client.spaces.list()
```

Note: 'limit' is not provided. Only first 50 records will be displayed if the number of records exceed 50

```

-----
-----
ID                                NAME                                CREATED c042954f-
ef7e-44d4-ac6b-904b3f29ed31 Novel Method 2022-1111T12:06:17.400Z
-----
-----

```

```
space_uid ="c042954f-ef7e-44d4-ac6b-904b3f29ed31"
```

```
space_uid {"type":"string"}
```

```
client.set.default_space(space_uid)
```

```
{"type":"string"}
```

```
client.software_specifications.list()
```

```

-----
-----
NAME                                ASSET_ID
TYPE
default_py3.6                      0062b8c9-8b7d-44a0-a9b9-46c416adcbd9
base
kernel-spark3.2-scala2.12          020d69ce-7ac1-5e68-ac1a-31189867356a
base
pytorch-onnx_1.3-py3.7-edt         069ea134-3346-5748-b513-49120e15d288
base
scikit-learn_0.20-py3.6            09c5a1d0-9c1e-4473-a344-eb7b665ff687
base
spark-mllib_3.0-scala_2.12         09f4cff0-90a7-5899-b9ed-1ef348aebdee
base
pytorch-onnx_rt22.1-py3.9          0b848dd4-e681-5599-be41-b5f6fccc6471
base
ai-function_0.1-py3.6              0cdb0f1e-5376-4f4d-92dd-da3b69aa9bda
base

```

shiny-r3.6	0e6e79df-875e-4f24-8ae9-62dcc2148306
base	
tensorflow_2.4-py3.7-horovod	1092590a-307d-563d-9b62-4eb7d64b3f22
base	
pytorch_1.1-py3.6	10ac12d6-6b30-4ccd-8392-3e922c096a92
base	
tensorflow_1.15-py3.6-ddl	111e41b3-de2d-5422-a4d6-bf776828c4b7
base	
autoai-kb_rt22.2-py3.10	125b6d9a-5b1f-5e8d-972a-b251688ccf40
base	
runtime-22.1-py3.9	12b83a17-24d8-5082-900f-0ab31fbfd3cb
base	
scikit-learn_0.22-py3.6	154010fa-5b3b-4ac1-82af-4d5ee5abbc85
base	
default_r3.6	1b70aec3-ab34-4b87-8aa0-a4a3c8296a36
base	
pytorch-onnx_1.3-py3.6	1bc6029a-cc97-56da-b8e0-39c3880dbbe7
base	
kernel-spark3.3-r3.6	1c9e5454-f216-59dd-a20e-474a5cdf5988
base	
pytorch-onnx_rt22.1-py3.9-edt	1d362186-7ad5-5b59-8b6c-9d0880bde37f
base	
tensorflow_2.1-py3.6	1eb25b84-d6ed-5dde-b6a5-3fbdf1665666
base	
spark-mllib_3.2	20047f72-0a98-58c7-9ff5-a77b012eb8f5
base	
tensorflow_2.4-py3.8-horovod	217c16f6-178f-56bf-824a-b19f20564c49
base	
runtime-22.1-py3.9-cuda	26215f05-08c3-5a41-a1b0-da66306ce658
base	
do_py3.8	295addb5-9ef9-547e-9bf4-92ae3563e720
base	
autoai-ts_3.8-py3.8	2aa0c932-798f-5ae9-abd6-15e0c2402fb5
base	
tensorflow_1.15-py3.6	2b73a275-7cbf-420b-a912-eae7f436e0bc
base	
kernel-spark3.3-py3.9	2b7961e2-e3b1-5a8c-a491-482c8368839a
base	
pytorch_1.2-py3.6	2c8ef57d-2687-4b7d-acce-01f94976dac1
base	
spark-mllib_2.3	2e51f700-bca0-4b0d-88dc-5c6791338875
base	
pytorch-onnx_1.1-py3.6-edt	32983cea-3f32-4400-8965-dde874a8d67e
base	
spark-mllib_3.0-py37	36507ebe-8770-55ba-ab2a-eafe787600e9
base	
spark-mllib_2.4	390d21f8-e58b-4fac-9c55-d7ceda621326
base	

autoai-ts_rt22.2-py3.10	396b2e83-0953-5b86-9a55-7ce1628a406f
base	
xgboost_0.82-py3.6	39e31acd-5f30-41dc-ae44-60233c80306e
base	
pytorch-onnx_1.2-py3.6-edt	40589d0e-7019-4e28-8daa-fb03b6f4fe12
base	
pytorch-onnx_rt22.2-py3.10	40e73f55-783a-5535-b3fa-0c8b94291431
base	
default_r36py38	41c247d3-45f8-5a71-b065-8580229facf0
base	
autoai-ts_rt22.1-py3.9	4269d26e-07ba-5d40-8f66-2d495b0c71f7
base	
autoai-obm_3.0	42b92e18-d9ab-567f-988a-4240ba1ed5f7
base	
pmml-3.0_4.3	493bcb95-16f1-5bc5-bee8-81b8af80e9c7
base	
spark-mllib_2.4-r_3.6	49403dff-92e9-4c87-a3d7-a42d0021c095
base	
xgboost_0.90-py3.6	4ff8d6c2-1343-4c18-85e1-689c965304d3
base	
pytorch-onnx_1.1-py3.6	50f95b2a-bc16-43bb-bc94-b0bed208c60b
base	
autoai-ts_3.9-py3.8	52c57136-80fa-572e-8728-a5e7cbb42cde
base	
spark-mllib_2.4-scala_2.11	55a70f99-7320-4be5-9fb9-9edb5a443af5
base	
spark-mllib_3.0	5c1b0ca2-4977-5c2e-9439-ffd44ea8ffe9
base	
autoai-obm_2.0	5c2e37fa-80b8-5e77-840f-d912469614ee
base	
spss-modeler_18.1	5c3cad7e-507f-4b2a-a9a3-ab53a21dee8b
base	
cuda-py3.8	5d3232bf-c86b-5df4-a2cd-7bb870a1cd4e
base	
autoai-kb_3.1-py3.7	632d4b22-10aa-5180-88f0-f52dfb6444d7
base	
pytorch-onnx_1.7-py3.8	634d3cdc-b562-5bf9-a2d4-ea90a478456b
base	

Note: Only first 50 records were displayed. To display more use 'limit' parameter.

```
software_space_id =
client.software_specifications.get_uid_by_name('tensorflow_rt22.1p
y3.9') software_space_id {"type":"string"}
```

```

from ibm_watson_machine_learning.repository import ModelMetaNames
model_details = client.repository.store_model(model
='/content/DigitModel.tgz', meta_props={
    client.repository.ModelMetaNames.NAME:"HandWritten Digit",
client.repository.ModelMetaNames.TYPE:'tensorflow_2.7',

client.repository.ModelMetaNames.SOFTWARE_SPEC_UID:software_space_id
}))

model_details

{'entity': {'hybrid_pipeline_software_specs': [],
  'software_spec': {'id': 'acd9c798-6974-5d2f-a657-ce06e986df4d',
  'name': 'tensorflow_rt22.1-py3.9'},
  'type': 'tensorflow_2.7'},
'metadata': {'created_at': '2022-11-11T13:54:04.498Z',
'id': '777041f1-532a-4e18-8173-82fa26f7bf4a',
'modified_at': '2022-11-11T13:54:08.231Z',
'name': 'HandWritten Digit',
'owner': 'IBMid-665002L1U6',
'resource_key': '483b2fee-2e4b-4c99-a7a9-dda728de2850',
'space_id': 'c042954f-ef7e-44d4-ac6b-904b3f29ed31'},
'system': {'warnings': []}}

model_id = client.repository.get_model_id(model_details)
model_id {"type":"string"}

client.repository.download(model_id, 'RECOGNITION_SYSTEM.tar.gb')

Successfully saved model content to file: 'RECOGNITION_SYSTEM.tar.gb'

{"type":"string"}

```