

# CDeep3M PRP

## Source code

1. [https://giterdone.crbs.ucsd.edu/ncmir/cdeep3m\\_py](https://giterdone.crbs.ucsd.edu/ncmir/cdeep3m_py) (python version of CDEEP3M)
2. [https://giterdone.crbs.ucsd.edu/ncmir/cdeep3m\\_py\\_docker](https://giterdone.crbs.ucsd.edu/ncmir/cdeep3m_py_docker) (Docker container for the python version of CDEEP3M)
3. [https://giterdone.crbs.ucsd.edu/ncmir/cil\\_cdeep3m\\_prp](https://giterdone.crbs.ucsd.edu/ncmir/cil_cdeep3m_prp) (Docker container for PRP workflow for the python version of CDEEP3M)

Build scripts for the above are in the **.gitlab-ci.yml** file in each repo. The builds are dependent so 3 uses the output from 2 and 2 uses the output from 1. Builds are triggered by any change to the repo. The latest build for the registries is tagged as **:latest**

## CIL Image Viewer

### Source code:

<http://cellimagelibrary.org/home>

### Kubernetes yaml file:

Server: iruka.crbs.ucsd.edu

```
/var/www/html/CIL-Storage-RS/templates/pod_a.yaml  
/var/www/html/CIL-Storage-RS/templates/pod_b.yaml  
/var/www/html/CIL-Storage-RS/templates/pod_c.yaml  
/var/www/html/CIL-Storage-RS/templates/pod_d.yaml
```

### Interactive testing on a PRP node

1. spin up a node

```
sudo -u apache kubectl create -f /export2/temp/cdeep3m/cil-cdeep3m_py.yaml --validate=false
```

2. wait for running state

```
sudo -u apache kubectl get pods  
NAME                                READY   STATUS    RESTARTS   AGE  
gpu-pod-cil-cdeep3m-py-testing     1/1     Running   0           1m
```

3. connect to the pod

```
sudo -u apache kubectl exec -it gpu-pod-cil-cdeep3m-py-testing bash  
root@gpu-pod-cil-cdeep3m-py-testing: /home/cdeep3m#
```

4. test

```
./CDEEP3M_prp --augspeed 1 --models 1fm --overlay --enhance --pod_id=A 3515 10.7295/W9CDEEP3M3
```

to rerun previously run jobs in `~/CDEEP3M_prp` change line 130

```
}else {
    print LOG getLoggingTime()."\t('.__LINE__') '$pod_id is not the first!! $data\n";
    exit 0;
}
return;
```

to

```
}else {
    print LOG getLoggingTime()."\t('.__LINE__') '$pod_id is not the first!! $data\n";
    leave (0);
}
return;
```

and uncomment line 513

```
sub leave{
    my $code =shift;
    #unset_pod_status();
    if ($code){
        post_url ("$_image_api_uri/Image_process_rest/update_cdeep3m_error/stage/$crop_id", 'error =>
true', $_image_api_user, $_image_api_pass);
    }
}
```

- then run the testing command, the first time through will reset the status and the second time it will run the prediction.  
5. When finished exit the pod with "exit" or CTRL d then delete the running pod

```
sudo -u apache kubectl delete -f /export2/temp/cdeep3m/cil-cdeep3m_py.yaml
```

## API & urls of interest

[https://microbial.crbs.ucsd.edu/Image\\_process\\_rest/crop\\_process\\_status/3564](https://microbial.crbs.ucsd.edu/Image_process_rest/crop_process_status/3564)  
[https://microbial.crbs.ucsd.edu/cdeep3m\\_prp/CCDB\\_6351](https://microbial.crbs.ucsd.edu/cdeep3m_prp/CCDB_6351)  
[https://microbial.crbs.ucsd.edu/cdeep3m\\_result/view/3743#](https://microbial.crbs.ucsd.edu/cdeep3m_result/view/3743#)  
[https://cildata.crbs.ucsd.edu/cdeep3m\\_results/3743/result/Segmented\\_0001.png](https://cildata.crbs.ucsd.edu/cdeep3m_results/3743/result/Segmented_0001.png)  
[https://cildata.crbs.ucsd.edu/cdeep3m\\_results/3743/overlay/overlay\\_001.png](https://cildata.crbs.ucsd.edu/cdeep3m_results/3743/overlay/overlay_001.png)  
[https://cildata.crbs.ucsd.edu/cdeep3m\\_results/3743/log/logs.tar](https://cildata.crbs.ucsd.edu/cdeep3m_results/3743/log/logs.tar)  
[https://cildata.crbs.ucsd.edu/cdeep3m\\_results/4977/log/CDEEP3M\\_prp.log](https://cildata.crbs.ucsd.edu/cdeep3m_results/4977/log/CDEEP3M_prp.log)  
[https://cildata.crbs.ucsd.edu/cdeep3m\\_results/4977/log/prediction.log](https://cildata.crbs.ucsd.edu/cdeep3m_results/4977/log/prediction.log)  
[https://cildata.crbs.ucsd.edu/cdeep3m\\_results/5551/others/1fm.tar](https://cildata.crbs.ucsd.edu/cdeep3m_results/5551/others/1fm.tar)  
[https://beanstalk.crbs.ucsd.edu/bs\\_console/?server=127.0.0.1:11300&tube=CIL\\_crop\\_image](https://beanstalk.crbs.ucsd.edu/bs_console/?server=127.0.0.1:11300&tube=CIL_crop_image)  
[http://flagella.crbs.ucsd.edu/cdeep3m/prp\\_demo](http://flagella.crbs.ucsd.edu/cdeep3m/prp_demo)  
<https://cdeep3m-stage.crbs.ucsd.edu/>