



St. Jude BioHackathon

Title

Scaling CBI image analysis pipeline by leveraging HPC resources

Category

DevOps and Community

Challenge

The CBI currently provides a JupyterHub service where users can run image analysis pipelines using one of the two CBI workstations that are running the JupyterHub instances. We would like to scale up the computation by using the HPC while keeping the interactivity of the jupyter notebooks and minimizing the additional time spent for packaging/containerizing the analysis pipelines.

Benefit

For CBI members: minimize the time spent on packaging/containerizing and focus on development of analysis pipelines; for St. Jude researchers: after scaling up, more users can will be able to make use of the image analysis tools/pipelines developed by the CBI.

Helpful Tools, Packages, or Software

Dask, Ray, JupyterLab on the HPC.

Test Data

An example pipeline will be provided.