JAGS on HPC

What is JAGS?

JAGS (Just Another Gibbs Sampler) is a software program that can be used to fit Bayesian statistical models using Markov Chain Monte Carlo (MCMC) simulation. It can be used to fit the type of model you have described, as well as a wide range of other statistical models.

Links:

[Website](#)

[Documentation](#)

Versions Available:

The following versions are available on the cluster:

- JAGS-4.3.0

How to load JAGS?

To load JAGS, use the following commands:

```
#Load the JAGS module
module load bio/jags/4.3.0
```

To verify if the module and dependencies are loaded correctly, use the following command.

```
#Show all the modules loaded
module list
```

This should list all the JAGS dependencies that are loaded- only jags in this case.

How to load JAGS?

To demonstrate the usage of this program, download the test files from the following link,

```
# Sample test files
wget https://versaweb.dl.sourceforge.net/project/mcmc-
jags/Examples/4.x/classic-bugs.tar.gz --no-check-certificate

# Unzip and go to /classic-bugs/vol1/bones
tar -xvf classic-bugs.tar.g

# Make slurm cript and paste code below
touch slurm.jags
```

Use the following slurm script as a reference for running jags,

```
#!/bin/bash

#SBATCH --job-name=jags-job
#SBATCH --output=jags-job.out
#SBATCH --error=jags-job.err
#SBATCH -p main
#SBATCH --qos main
#SBATCH --nodes=1
#SBATCH --ntasks=1
```

```
#SBATCH --cpus-per-task=4

# Load the JAGS module
module load bio/jags/4.3.0

# Run JAGS with the command file
jags test1.cmd
```

The output files should be in same directory as the slurm script.

Where to find help?

If you are stuck on some part or need help at any point, please contact OIT at the following address.

https://ua-app01.ua.edu/researchComputingPortal/public/oitHelp