# Setup Guide for AgAID Digital AgAthOn 2025

Wednesday, January 22, 2025 6:28 PM

## **About this Document**

Please review all the resources in this document. Note that there are **3 main pages** of resources:

- 1. Setup Guide for AgAID Digital AgAth0n 2025
- 2. Crop Residue Coverage Prediction Challenge
- 3. Snowpack Prediction Challenge

To navigate through the content just click on the title of each page listed in the left panel.

Remember that the description of the challenges are also available as pdf files on the Files tab of this channel.

## **Setup Start**

- 1. Organize a Team meeting as early as possible in the AgAthOn to discuss what computing resources your Team will need and use. Even though, we are providing Kamiak resources, you are welcome to use any other platform you would like such as Azure, AWS, GCP, etc. Ask yourselves the question, what resources will each Team member need to effectively contribute to the team's goal during the AgAthOn?
- 2. Designate a team member as the "**Team Leader.**" The Team Leader's role will be to communicate any technical issues or questions the team has. All members can use the Troubleshooting channel to ask questions, but it is always a good idea to have a team leader we can check in with.
- 3. If you are going to use AI-powered chatbots, remember, you will need to provide the prompts you and your team used, so make sure to store the history.

# **Kamiak Setup**

## 1. Logging into Kamiak

Each AgAthOn participant will have a Kamiak account created for them. Accounts without a faculty sponsor are given a "class" account with access to the "class" partition, but for the duration of the hackathon event you will also have access to the "kamiak" and "camas" partitions.

### ssh your.name@kamiak.wsu.edu

Username and password: Your Kamiak username and password will be your WSU network ID (NID) and its associated password.

#### 2. Team Folder

Your team folder is: /scratch/project/hackathon/teamX/ where X should be replaced by the number of your team according to what the Team Assignments tab in the General channel indicates.

### 3. Allow group read/write permissions in your team folder

To enable creation of group-writable files and folders in your team folder, execute the following on Kamiak and log back in.

echo "umask g+rwx" >> ~/.bash\_profile

## 4. Challenges' Data

Data for the different challenges has been placed inside:

/scratch/project/hackathon/data/

### 5. Job submission

○ To submit NON-GPU jobs:

sbatch --account=hackathon --partition=kamiak

○ To submit GPU jobs:

sbatch --account=hackathon --reservation=hackathon gpu --gres=gpu:1

Please only use the minimum number of GPUs required. There are a limited number available.

Please note that the above hacakthon\_gpu reservation will only be available from Friday Jan 31 12noon to Sunday Feb 2 4pm.

#### O For idev:

Add the above options to the "idev" command for an interactive session.

#### **Caveats**

Suggest always doing a "module load intel" in the job script.

# What to turn in at 4:00 PM PST Sunday, February 2nd

Late submissions will not be considered as judges will be starting at this time.

### Sunday, February 2nd, 4:00 PM PST your team MUST turn in:

- A folder named TeamX (where X is the number of your team as indicated in the Team Assignments). Create the folder inside the Files tab > <u>Final Presentations</u> folder in this General Channel. *Inside your team folder you should include:*
  - 1. A 5-minute max video presentation recording that addresses the following:
    - i. Your specific objective/problem statement
    - ii. Motivation/Rationale/Importance of your chosen objective/problem statement/ who is your customer?
    - iii. Approach/Methods/Model description (how did you do it?)
    - iv. How did you use ML tools? What tools did you use? (brief)
    - v. Results/Prototype demo
    - vi. How did you collaborate effectively as a team? (brief)
    - vii. Anything else, including fun experiences, challenges/what you learned

If you want to send a YouTube link, please, create a word document that contains the link and upload that document to your folder.

Check out the "<u>Hackathon video presentation tips.pdf</u>" file that is provided in this General channel under the Files tab.

- 2. Outputs defined in the challenge you are working on. You will find the details in the section *Expected Outputs* of each challenge
  - i. Crop Residue Prediction Challenge
  - ii. Snowpack Prediction Challenge