Jetson

A Jetson is a Linux-based edge device equipped with a hardware acceleration module, similar to a GPU. Keep in mind that it can be used as a desktop computer, so most of the time, the best way to know what is going on is just by plugging in a screen and some peripherals!

Programming Language

ROS can work with either C++ or Python, if you are an inexperienced programmer, we highly recommend using python.

ROS

An extensive documentation of the middleware can be found under their tutorial page, http://wiki.ros.org/ROS/Tutorials Keep in mind that you will need to follow the tutorials related to ROS melodic. If you face any issues, do not hesitate to contact the support team.

AI and Computer vision

- Open CV: Useful for image manipulation and off-the-shelf state-of-the-art computer vision algorithms, preinstalled in the Ubuntu image. Visit: https://opencv.org/ for more detailed documentation.
- Google Colab: Python-based online computing cluster, very useful if you are interested in training your own machine learning algorithms.
- Tensorflow/PyTorch: Libraries used to train and deploy your AI models.
- Jetson Inference: Deep-learning-centred GitHub repo developed by Nvidia. https://github.com/dusty-nv/jetson-inference

Contact and Support

All the communication will be handled through our discord server https://discord.gg/aQDNvtqq6X

Submission Platform and Judge board

The submission platform and judging procedure are going to be announced during the event through discord.