ADIAT

Automated Drone Image Analysis Tool

Setting Up CUDA for ADIAT on Windows

Requirements

- NVIDA GPU with support for CUDA acceleration
- CUDA version 12.x or later
- cnDNN version 9.x or later

Step-by-Step Guide

1. Verify Your GPU is Compatible

- **NVIDIA GPU Required:** Only NVIDIA GPUs are supported for CUDA acceleration.
- **Supported GPU:** Must be a CUDA-capable GPU (generally GeForce GTX 10xx/RTX, Quadro, Tesla, etc.).
- **Find Your GPU:**
    - Press Win + X, select **Device Manager** → Expand **Display adapters**.
    - If you see an NVIDIA card listed, continue.
- **Check CUDA Compatibility:**
    - Visit NVIDIA CUDA GPUs to confirm your model is listed.

2. Install the Latest NVIDIA Driver

- Go to the NVIDIA Driver Downloads page.
- Select your GPU model, download, and install the latest driver.
- **Reboot** after installation.

3. Install CUDA Toolkit

- Using your GPU with ADIAT requires CUDA (version >= 12.x).
- Download from NVIDIA CUDA Toolkit Downloads.

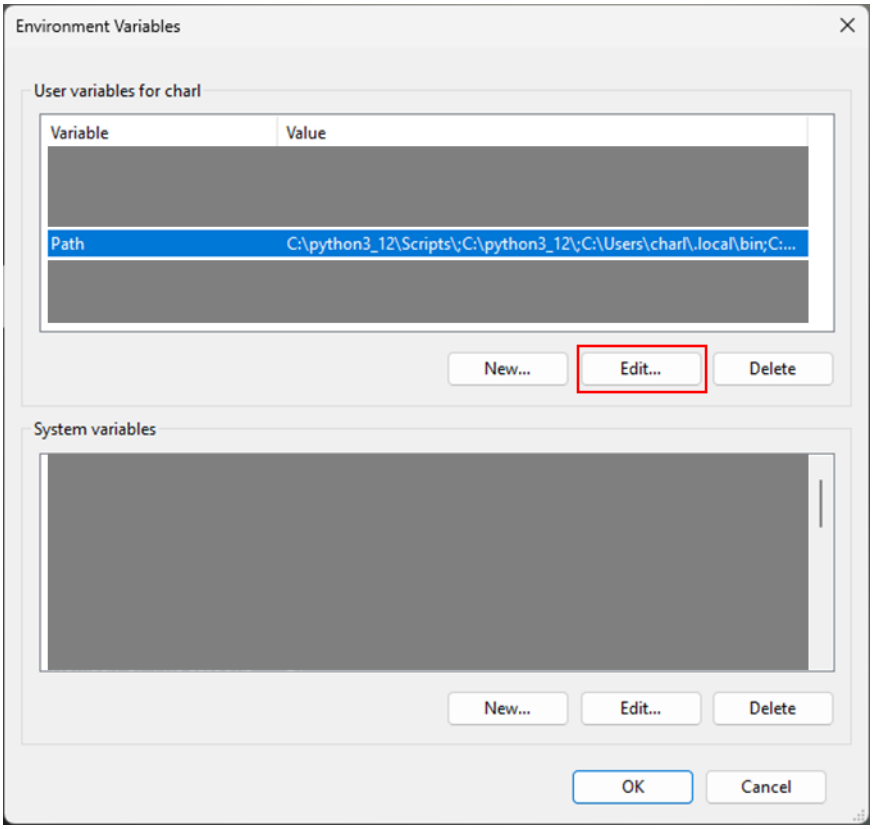
- Run the installer. **Install to the default path** (e.g., C:\Program Files\NVIDIA GPU Computing Toolkit\CUDA).

4. Install cuDNN Library

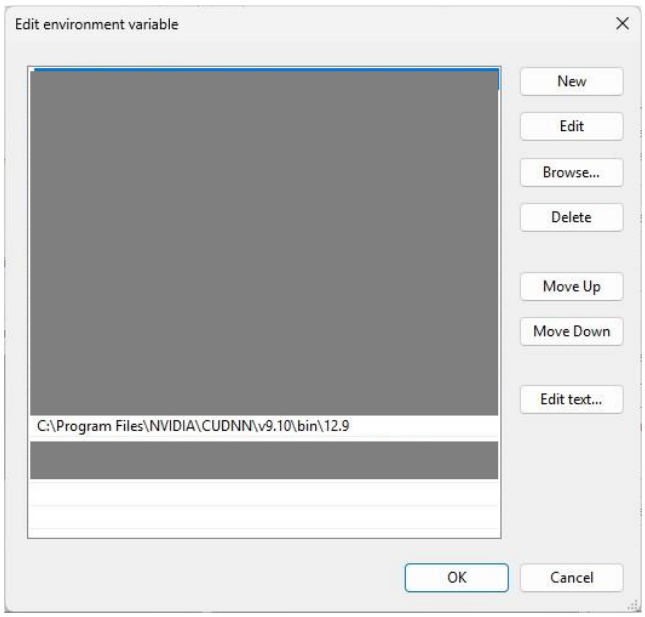
- Go to NVIDIA cuDNN Download.
- Download the latest version of cuDNN(version >= 9.x).
- Run the installer. **Install to the default path** (e.g., C:\Program Files\NVIDIA\CUDNN).

5. Add cuDNN and CUDA to Your System PATH

- **Open Environment Variables:**
    - Press Win + S, type “Environment Variables”, select **Edit the system environment variables**, then click **Environment Variables**.
- **Edit the “Path” variable** (under User variables):



- Add:
    - C:\Program Files\NVIDIA GPU Computing Toolkit\CUDNN\vX.X\bin\YY.Y



- **Click OK** to save.