

**NAME**

llamafile-imatrix — importance matrix builder

**SYNOPSIS**

**llamafile-imatrix** [flags...] -m *model.gguf* -f *training.data* [-o *imatrix.dat*]

**DESCRIPTION**

**llamafile-imatrix** Compute an importance matrix for a model and given text dataset. Can be used during quantization to enhance the quality of the quantum models. More information is available here: <https://github.com/ggerganov/llama.cpp/pull/4861>

**OPTIONS**

The following options are available:

- version  
Print version and exit.
- h, --help  
Show help message and exit.
- m *FNAME*, --model *FNAME*  
Model path in the GGUF file format.  
Default: *models/7B/ggml-model-f16.gguf*
- f *FNAME*, --file *FNAME*  
Mandatory path of file containing training data, e.g. *wiki.train.raw*
- o *FNAME*, --output-file *FNAME*  
The name of the file where the computed data will be stored. If this flag is missing then *imatrix.dat* is used.
- ofreq, --output-frequency  
Specifies how often the so far computed result is saved to disk. The default is 10 (i.e., every 10 chunks).
- ow, --output-weight  
Specifies if data will be collected for the *output.weight* tensor. Experience indicates that it is better to not utilize the importance matrix when quantizing *output.weight*, so this is set to false by default.

**PROTIPS**

For faster computation, pass the -ngl 9999 flag for GPU of floating.

**SEE ALSO**

*llamafile*(1), *llamafile-quantize*(1)