

This `./upstream` subfolder contains fixes for `FindCUDA` that are introduced in later versions of cmake but cause generator expression errors in earlier CMake versions. Specifically:

1. a problem where a generator expression for include directories was passed to NVCC, where the generator expression itself was prefixed by `-I` . As the NNPACK include directory generator expression expands to multiple directories, the second and later ones were not prefixed by `-I` , causing NVCC to return an error. First fixed in CMake 3.7 (see [Kitware/CMake@7ded655f](#)).
2. Windows VS2017 fixes that allows one to define the ccbinc path differently between earlier versions of Visual Studio and VS2017. First introduced after 3.10.1 master version (see [Kitware/CMake@bc88329e](#)).

The downside of using these fixes is that `./upstream/CMakeInitializeConfigs.cmake` , defining some new CMake variables (added in [Kitware/CMake@48f7e2d3](#)), must be included before `./upstream/FindCUDA.cmake` to support older CMake versions. A wrapper `./FindCUDA.cmake` is created to do this automatically, and to allow submodules to use these fixes because we can't patch their `CMakeList.txt` .

If you need to update files under `./upstream` folder, we recommend you issue PRs against [the CMake mainline branch](#), and then backport it here for earlier CMake compatibility.