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:

- 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 ccbin 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.