

### Warning

There are known non-determinism issues for RNN functions on some versions of cuDNN and CUDA. You can enforce deterministic behavior by setting the following environment variables:

On CUDA 10.1, set environment variable `CUDA_LAUNCH_BLOCKING=1`. This may affect performance.

On CUDA 10.2 or later, set environment variable (note the leading colon symbol)

`CUBLAS_WORKSPACE_CONFIG=:16:8` or `CUBLAS_WORKSPACE_CONFIG=:4096:2`.

See the [cuDNN 8 Release Notes](#) for more information.