

Not Using Relative Path (NURP)

Example: Listing 1 shows that PyTorch needs to load the NVML library when obtaining information from the NVidia GPU. We found that the developer only gave the name of the DLL without indicating its path when implementing this operation ¹. Additionally, there was no restriction on the operating system used for this operation.

```
1 from ctypes import CDLL, c_int, byref
2 nvml_h = CDLL("libnvidia-ml.so.1")
```

Listing 1. Design Smell - Not Using Relative Path

¹https://github.com/pytorch/pytorch/blob/v2.0.1/torch/cuda/__init__.py[542-543]