Program Listing for File gpu_info.hpp

Return to documentation for file (include/holoscan/core/system/gpu_info.hpp)

/* * SPDX-FileCopyrightText: Copyright (c) 2023 NVIDIA CORPORATION & AFFILIATES. All rights reserved. * SPDX-License-Identifier: Apache-2.0 * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ #ifndef HOLOSCAN_CORE_SYSTEM_GPU_INFO_HPP #define HOLOSCAN_CORE_SYSTEM_GPU_INFO_HPP #include <memory> #include "nvml_wrapper.h" namespace holoscan { namespace GPUMetricFlag { enum : uint64_t { DEFAULT = 0x00, GPU_DEVICE_ID = 0x01, GPU_UTILIZATION = 0x02, MEMORY_USAGE = 0x04, POWER_LIMIT = 0x08, POWER_USAGE = 0x10, TEMPERATURE = 0x20, ALL = GPU_DEVICE_ID | GPU_UTILIZATION | MEMORY_USAGE | POWER_LIMIT | POWER_USAGE | TEMPERATURE, }; } *// namespace GPUMetricFlag* struct GPUInfo { uint64_t metric_flags = 0; uint32_t index = 0; char name[NVML_DEVICE_NAME_BUFFER_SIZE] = {}; bool is_integrated = false; nvml::nvmlPciInfo_st pci = {}; char serial[NVML_DEVICE_SERIAL_BUFFER_SIZE] = {}; char uuid[NVML_DEVICE_UUID_BUFFER_SIZE] = {}; uint32_t gpu_utilization = 0; uint32_t memory_utilization = 0; uint64_t memory_total = 0; uint64_t memory_free = 0; uint64_t memory_used = 0; float memory_usage = 0.0f; uint32_t power_limit = 0; uint32_t power_usage = 0; uint32_t temperature = 0; }; } *// namespace holoscan* #endif/* HOLOSCAN_CORE_SYSTEM_GPU_INFO_HPP */