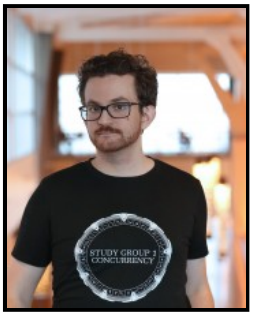

Other

Modern CUDA C++

Bryce Adelstein Lelbach

NVIDIA

Digital Media Center Theatre
June 14, 2019 - 10:00 am

Abstract:

Historically, GPUs have been thought of as specialized processors which specific compute tasks can be offloaded onto. However, NVIDIA's recent advancements in GPU hardware and software have transferred GPUs into general-purpose bandwidth-optimized processors which can run almost any C++ code. In this talk, we'll discuss those advancements, what they've enabled, and what's coming down the road.

Speaker's Bio:

Bryce Adelstein Lelbach has spent nearly a decade developing libraries in C++. Bryce is passionate about C++ evolution and is one of the leaders of the C++ community. He is an officer of ISO/IEC JTC1/SC22/WG21, the C++ standards committee. Bryce chairs both the C++ committee's Tooling Study Group (SG15) and Library Evolution Incubator (SG18). He is the program chair for the C++Now and CppCon conferences, and the chief organizer of the Bay Area C++ user group. On the C++ committee, he has personally worked on the C++17 parallel algorithms, executors, futures, senders/receivers, multidimensional arrays, and modules. Bryce works at NVIDIA, where he leads the CUDA C++ core libraries team. He is one of the initial developers of the HPX parallel runtime system. He also helped start the LLVMLinux initiative and has occasionally contributed to the Boost C++ libraries.

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