Tools of the Trade

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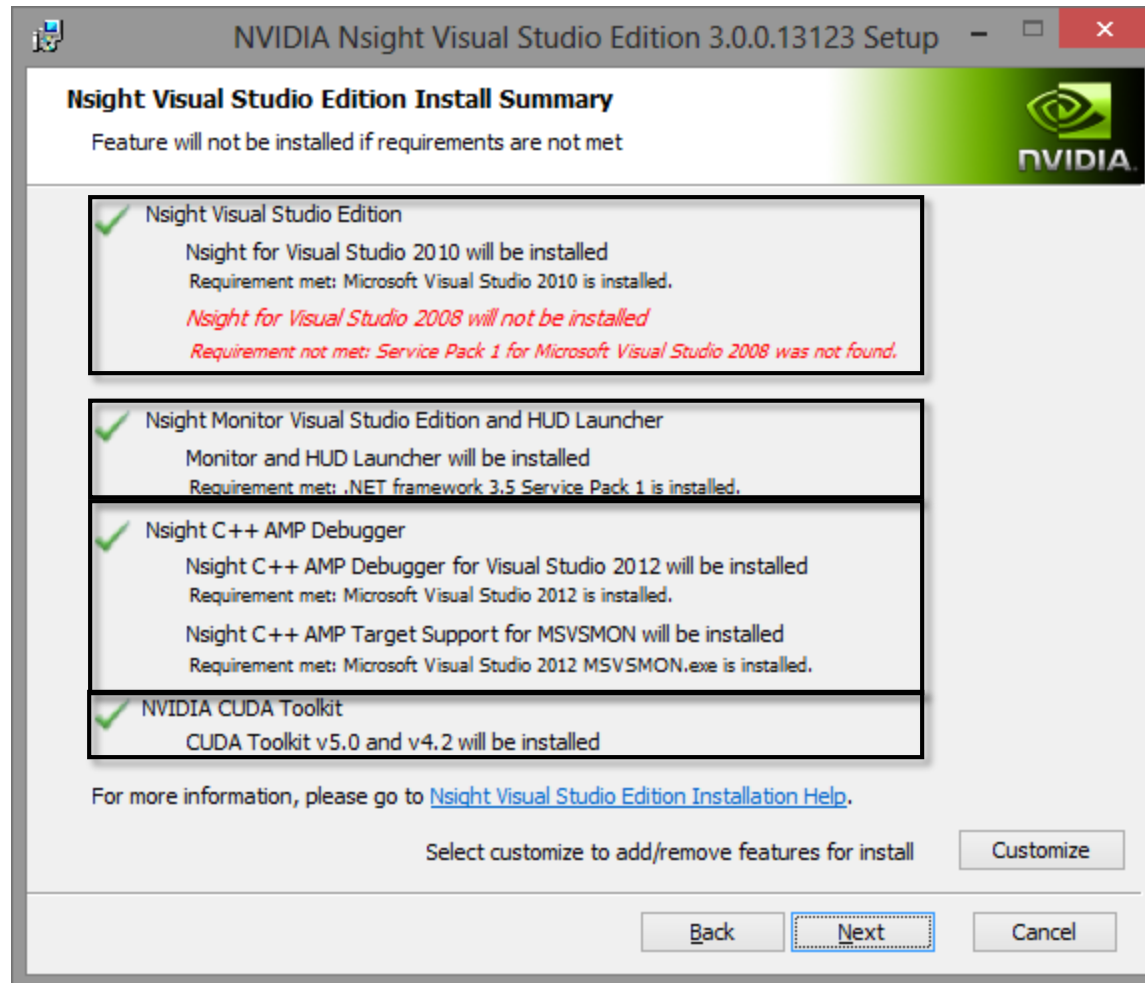
@dnesteruk

pluralsight
hardcore developer training

Overview

- **Windows, Mac OS, Linux**
  - This course uses Windows/Visual Studio
  - This course focuses on desktop GPU development
- **CUDA Toolkit**
  - LLVM-based compiler
  - Headers & libraries
  - Documentation
  - Samples
- **NSight**
  - Visual Studio: plugin that allows debugging
  - Eclipse IDE
- http://developer.nvidia.com/cuda
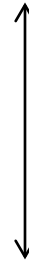
CUDA Tools

What is NSight?

- **Many developers, few GPUs**
  - No need for each dev to have GPU
- **Client-server architecture**
- **Server with GPU (target)**
  - Runs Nsight service
  - Accepts connections from developers
- **Clients with Visual Studio + NSight plugin (host)**
  - Use NSight to connect to the server to run application and debug GPU code
- **Caveats**
  - Need to use VS Remote Debugging to debug CPU code
  - Need your own mechanism for syncing output

Target GPU(s)
NSight Service

Visual Studio w/NSight