WSL Graphics Architecture

Wednesday, September 16, 2020 2:15 PM (45 minutes)

Microsoft announced at //build2020 that support for GPU hardware acceleration, through virtual GPU, was coming to the Windows Subsystem for Linux (WSL). This support enables Linux applications running in a WSL VM to leverage and share the host GPU through a variety of well-known graphics and compute APIs.

This talk will give an overview of the architecture, all the way from the Windows kernel, to the Linux kernel, to Linux userspace: How the various pieces fit together to enable GPU acceleration in various scenarios, from ML and AI compute tools and framework to accelerating rendering of GUI applications. We will go through some of the design choices we made and how we're striving toward making WSL a great environment to experience Linux applications.

This will also be a good opportunity to provide feedback on this design directly to the engineers at Microsoft, and help ensure that the right thing is being built and maintained.

GSoC, EVoC or Outreachy

No

Code of Conduct

Yes

Primary authors: NATALIE, Jesse (Microsoft); PRONOVOST, Steve (Microsoft)

Session Classification: Main Track

Track Classification: Talk (full slot) (Closed)