

Everything Wrong With FPGAs

Friday, October 4, 2019 11:40 AM (45 minutes)

FPGAs and their less generic cousin, specialized accelerators have come onto the scene in a way that GPUs did 20 or so years ago. Indeed new interfaces have cropped up to support them in a fashion resembling early GPUs, and some vendors have even opted to try to use DRM/GEM APIs for their devices.

This talk will start with a background of what FPGAs are, how they work, and where they're currently used. Because the audience is primarily people with graphics/display background, I will make sure to cover this well. It will then discuss the existing software ecosystem around the various usage models with some comparison of the existing tools. If time permits, I will provide a demo comparing open tools vs. closed ones.

The goal of the talk is to find people who have lived through DRI1 days and are able to help contribute their experience (and coding) toward improving the stack for the future accelerators.

Currently, my focus is on helping to improve a fully open source toolchain, and so I will spend more time on that than API utilization.

Code of Conduct

Yes

GSoC, EVoC or Outreachy

No

Presenter: WIDAWSKY, Ben

Session Classification: Main Track

Track Classification: Talk (full slot) (closed)