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Stories from the Front Lines: The Good, Bad, and Ugly of Building an Opensource Distributed Platform for Scientific Compute: Software, Hardware, and Community

Monday, 30 November 2020 14:30 (30 minutes)

In this talk I'll provide some stories from leading the ChRIS computing effort (<https://chrisproject.org>) over several years as it grew from simple scripts that ran neuro-MRI analysis programs in a small lab to a distributed container based platform that is both cloud and HPC ready and currently actively supported by Red Hat, Inc, and their OpenShift platform for cloud computing.

While providing conceptual overviews of the system architecture, I will focus specifically on how choices in programming language, frameworks, architecture, documentation, github and more all played out – the good, the bad, and the ugly.

I'll touch on how these choices impact portability across computing architectures – including PowerPC and of course upcoming ARM architectures in Apple consumer products.

Finally, I'll talk about the complexity in fostering community about growing open source scientific projects with some insights into some of the pitfalls and highlights.

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No

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