

# **The Pacific Research Platform and Chase-CI .... A distributed platform for interactive and batch use from Machine Learning with GPUs and FPGAs to Multi-Messenger Astrophysics**

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The NSF funded Pacific Research Platform Project operates a distributed compute environment including GPUs and FPGAs as accelerators that seamlessly extends into Google Cloud for use of TPUs as accelerators. It offers interactive access via Jupyter notebooks, and High Throughput Computing access via the Open Science Grid. The former tends to be the preferred platform for machine learning and AI applications, while the latter is primarily used by IceCube and LIGO for neutrinos and gravitational waves as windows to the universe. In this talk, we describe how we make these seemingly opposites, and hard to reconcile modalities of computation coexist within a single Kubernetes cluster.

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