

*HPC, Geophysics and the Cloud: A perspective from Schlumberger's Software Technology Innovation Center*

Short summary:

In 2015 Schlumberger opened their Software Technology Innovation Center (STIC) in Menlo Park, California. Working with local universities, Silicon Valley companies, and a variety of internal teams and clients, STIC has yielded many successful projects within the realms of machine learning, data analytics, user experience and high performance computing. A selection of these will be discussed, with an emphasis on Schlumberger's Virtual Data Center, where thousands of cloud based virtual machines and GPUs are used to process and image massive seismic datasets.

Bio:

Chris Leader has worked as a Software Geophysicist within Schlumberger for the past 18 months. Immediately prior, Chris received his PhD from Stanford University in Reflection Seismology, where his primary research focuses were on coherent wavefield separation and highly parallelised inversion solutions. Chris received his MSc from Imperial College in Petroleum Geophysics, and a BA from Oxford University in physics.