

2020 DGS Milestones

Company

- In business since March 2019. This is our two-year anniversary
- Preferred provider for Halliburton and Amazon Network Partners
- SEG books: 2-volume seismic processing (published), Machine Learning (accepted)

2020 Highlights

Research

- Helped develop a novel technique for analyzing the uncertainty of automated fault interpretations. This approach applies machine learning techniques to identify and compare automated fault picks on multiple offset volumes. This research is patent-pending and is covered in a forthcoming SEG paper.
- Identified, prototyped, and benchmarked a broad set of new cloud based big-data technologies to manage, analyze, and visualize seismic meta-data (including navigation and trace headers) for huge (1-100 billion traces) prestack datasets

Consulting

- Rapidly defined architecture, parameters, and performed large scale benchmarks to support a bid for a large seismic imaging project to be executed on the cloud.
- Managed Landmark's GeoProbe onshore/offshore development team

Training

- Produced and delivered an eight-day, virtual, hands-on machine learning workshop to oil company and research institute employees.
- Delivered introductory seismic processing training to research and support personnel using the Landmark's SeisSpace processing system
- Generated training materials and exercises for advanced seismic processing on SeisSpace

Software development and support

- Ported Landmark's classic DepthTeam Express velocity modeling application to a new operating system, database version, and Landmark's new build system
- Ported and upgraded Landmark's GeoProbe 3D visualization application
- Created several new SeisSpace tools including prestack modeling, marine streamer motion correction, Python bridges
- Diagnosed a long-standing problem with SeisSpace 5-D interpolation (repaired this year)

2021 Offerings

- 20% discount on Machine Learning Workshop – English or Spanish
- SeisSpace basic and advanced training
- Cloud Processing/Machine Learning, research, software development, and consulting