

Applied Machine Learning and Advanced Analytics with Oil and Gas Data

20th Sept 2019 -Stavanger NPD offices

Stavanger Time	Title	Presenter
08:00	Welcome / setting the scene	Peter Bormann (ConocoPhillips)
08:10		
08:10	An Introduction: From Traditional Machine Learning to Deep Learning	Anders Waldeland (Norsk Regnesentral)
08:40		
08:40	Automatic Seismic Interpretation. A review of architectures and model performances	Dimitrios Oikonomou (Earth Science Analytics)
09:00		
09:00	Using machine learning for seismic interpretation. Experiences from Repsol	German Larrazabal (Repsol)
09:20		
09:20	Combining Artificial Intelligence with Human Reasoning for Seismic Interpretation	James Lowell (Geoteric)
09:40		
09:40	Applications of artificial intelligence in geoscience at Total : Deep Neural Networks in seismic interpretation	S. Guillon (Total)
10:00		
10:00	Break	
10:00	Deep Learning applied for Seismic Horizon Interpretation	Jens Grimsgaard (Equinor)
10:20		
10:20	A Million wells, using procedural data generation based on reduced physics to train deep neural network architectures for subsurface development projects in California, USA	Nathan Jones (CRC)
10:40		
10:40	Reservoir Petrophysical Properties estimation from drill cuttings using advanced data analytics	Andrea Peña (Repsol)
11:00		
11:00	Deep QI: A Machine Learning Approach to Quantitative Interpretation of Subsurface Data	Ehsan Naeini (IkonScience)
11:20		
11:20	Lunch and presentation of hackathon outcomes	
11:40	Equinor innovation culture, how to use open innovation to solve real problems	Knut Sebastian Tunland (Equinor)
12:40		
12:40	Core to seismic property prediction - 3D rock property prediction using machine learning in the Norwegian North Sea	Steve Purves (Earth Science Analytics)
13:05		
13:05	How can machine learning add value to making inferences from reservoir data?	Vasiliy Demyanov (Heriott Watt Univ.)
13:25		
13:25	An ensemble-based kernel learning approach to account for model errors of rock physics models in 4D seismic history matching: a real field case study.	Xiaodong Luo (NORCE)
13:45		
13:45	Data-driven estimates of reservoir properties from 3D/4D seismic – brown field study	Evgeny Tolstukhin (ConocoPhillips)
14:05		
14:05	Break	
14:25	Creating Trends for Reservoir Modelling Using ANN	Markus Lund Vevle (Emerson)
14:45		
14:45	Gas flow rate reconciliation and assessment of hydrate formation risk	Anders Sandnes (Solution Seeker)
15:05		
15:05	Using machine learning to read composite logs	Henri Blondelle (Agile DD)
15:25		
15:25	Using NLP to make unstructured data highly accessible in E&P	Vidar Hjelmeland Brekke (AkerBP)
15:45		
15:45	Goodbye and thanks for everything	Elisabeth Femsteinevik (DNO)
16:05		
16:10		